QUALITY, COSTS AND COST RECOVERY:

A COMPARATIVE STUDY OF THE UNIDAD SANITARIA OF THE MINISTRY OF HEALTH (MOH) AND PROSALUD IN SANTA CRUZ, BOLIVIA

FINAL REPORT

September 1992

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Prepared for the Ministry of Public Health and Social Welfare and USAID/Bolivia
under contract no. LAC-0657-C-00-0051-00 LAC Health and Nutrition Sustainability
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TABLE OF CONTENTS

LIST OF APPENDICES

ACKNOWLEDGMENTS

The authors gratefully acknowledge the support and assistance we received in planning and carrying out this study. In particular, we wish to thank Dr. Jose A. Henicke Bruno, Director of the Unidad Sanitaria of Santa Cruz and his very helpful staff, and Dr. Carlos Cuellar and Lic. Antonio Arrázola of PROSALUD and their excellent staff for providing guidance and feedback throughout the study.

We want to thank Ana María Paredes and María Esther Coca for their focus group work; and the Nursing Department of the Universidad Evangélica Boliviana for providing four superb graduate nurses, Carmen Velasco, Rosie Bauer, Joanna Argandona, Vilma Flores and María Edith Andrade, and a professor of nursing, Albertina Savala, to assist with both the patient satisfaction survey and the observation of technical quality.

Finally, a special thanks to the staff of the PROSALUD Management Support Unit for their logistical support ranging from clerical to data processing.

Without the support and enthusiasm of all the above personnel, this study would not have been possible.

I. INTRODUCTION

I.1 Purpose of the Study

The purpose of this study is to assist the Ministry of Health (MOH)/Unidad Sanitaria de Santa Cruz to better understand the strengths and weaknesses of its primary health care delivery system in the city of Santa Cruz and to make recommendations for improving the system and ultimately the health care services provided to MOH clients. The Ministry is concerned about the health needs of the indigent and its ability to provide quality services to this target population.

The Unidad Sanitaria has a limited resource base to meet the primary, secondary and tertiary care needs in the Region of Santa Cruz. The majority of these limited resources have been focused on the rural areas and secondary care.

Scarce resources for the city of Santa Cruz result partly from a decision made a few years ago to expand the number of urban health care centers without providing sufficient additional operating funds nor additional Ministry positions to support and staff the centers. Underfunding and a shortage of staff has resulted in services of declining quality. At the same time the MOH decided to charge for curative services at all facilities, requiring patients to pay for services at the same time quality was deteriorating.

This report is the result of a desire by the Ministry of Health/Unidad Sanitaria of Santa Cruz, Bolivia to **address this shortage of resources, improve quality and increase utilization and cost recovery** in its urban health centers in the City of Santa Cruz.

In order to identify specific problems and possible solutions, the Unidad Sanitaria suggested that this study analyze the strengths and weaknesses of both the MOH health care system and the PROSALUD private non-profit health care system operating in Santa Cruz, compare the PROSALUD system with the MOH system, identify aspects of the PROSALUD system that could be adapted to the MOH system in Santa Cruz, and recommend alternative solutions that are compatible with the Unidad's scarce resources.

The field work for the study was conducted between February and June, 1992. The data were analyzed and the report written between June and September, 1992.

I.2 Methodology and Organization of the Report

The analysis focused on two MOH and two PROSALUD Health Centers. The methodology included the following components:

- Analysis of recurrent costs at the facility level using data from a 3-month period of 1991.
- Assessment of operational systems and processes including in-depth interviews of health center and headquarters staff.

- Observation of technical service delivery quality (direct observation of five specific services being provided by both doctors and nurses).

- Focus groups of patients (nine focus groups totaling 70 patients, 35 from PROSALUD and 35 from MOH, who had visited one of the centers in the previous two weeks).

- Survey of patients (interviews of 100 patients in each of the four centers during their visit to the centers).

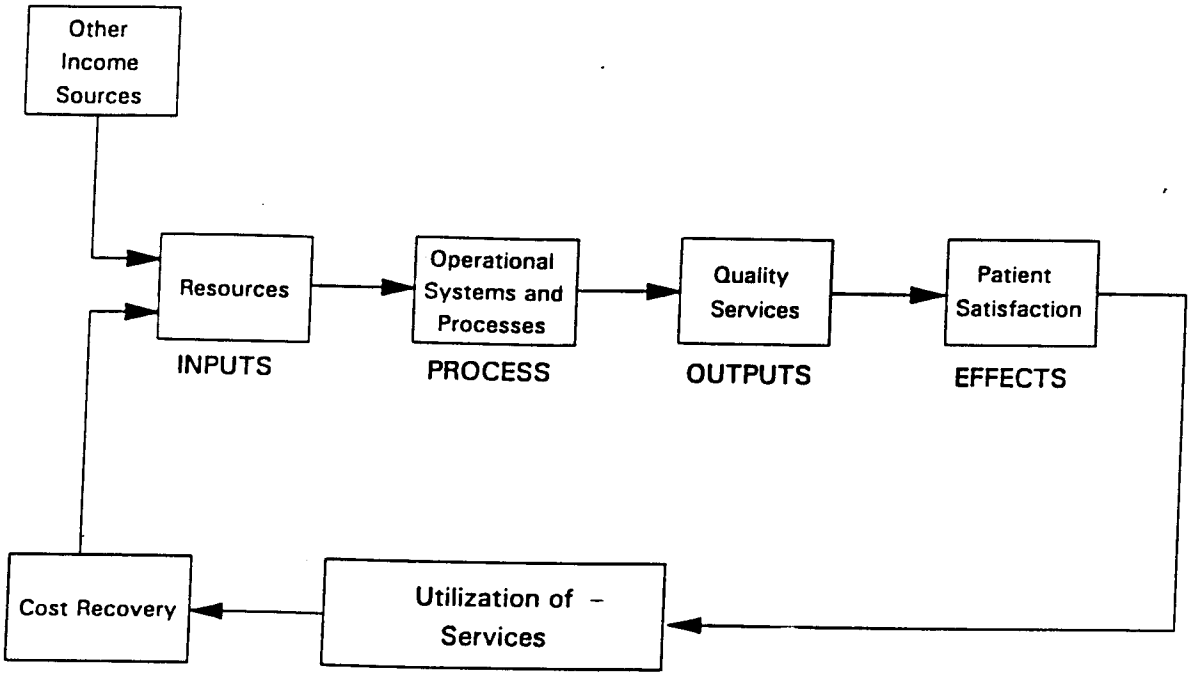
Detailed methodologies of each component are provided in the individual component sections that follow.

Two pairs of comparable health centers were selected by the MOH and PROSALUD, i.e., they serve similar populations in terms of income level (using comprehensive market analyses done by PROSALUD of the communities it serves), offer similar services (a mix of preventive and curative with facility for deliveries) and charge similar fees. La Madre of PROSALUD was compared with Virgen de Cotoca of the MOH, and El Carmen of PROSALUD with Santa Rosita of the Ministry. La Madre and Virgen de Cotoca are in the same geographical area of Santa Cruz as are El Carmen and Santa Rosita.

Local consultants gathered and organized the data on recurrent costs, observed service delivery quality, and conducted focus groups and exit interviews. Analysis and report preparation was done by both local consultants and staff and consultants of LAC-HNS. Excellent assistance/cooperation was provided by both PROSALUD and Unidad Sanitaria staff.

The organization of the report is based on a logical flow and relationship of the key components. Because resources or lack thereof seems to be the most critical factor for both systems, the report begins there. As Figure 1 shows, resources result in **operational systems, processes and staffing** (including attitudes and motivation) which in turn impact on **quality** of services; which influences **patient satisfaction**; which results in **utilization** (or non utilization) of services and **cost recovery** (assuming fees are reasonable). In both the MOH and PROSALUD, cost recovery then becomes the principal resource for the system.

Figure 1



I.3. Summary of Findings

- PROSALUD is spending at higher levels in its urban centers than is the MOH.
- Unit costs are considerably higher in the MOH.
- PROSALUD has, for the most part, excellent operational systems, while the Ministry's systems are average to poor.
- Technical quality of direct provider care, as measured by observation, is similar in the two systems (however, critical deficiencies were found in one of the MOH centers).
- Quality of care as perceived by patients is better in PROSALUD than in MOH facilities.
- Patient satisfaction is higher with PROSALUD than with the MOH.
- Utilization and cost recovery is much higher in PROSALUD than in the MOH.

II. FINDINGS

II.1 Resources for Primary Health Care in Santa Cruz

II.1.1 Ministry of Health:

The provincial arm of the Ministry of Health, the Unidad Sanitaria de Santa Cruz, receives very limited budgetary support from the National Treasury for its health activities in the Province of Santa Cruz. Of the total MOH 1992 budget for the Region of Santa Cruz, 48% comes from user fees. The Regional budget is broken down as follows (in Bolivianos[1]):

Total 1992 budget.....34,883,376 B's

Salaries & bonus:

National Treasury.....11,375,168 (57%)
User fees.....8,439,190 (43%)
total.....19,814,358

Pharmaceuticals:

National Treasury.....5,461,143 (73%)
User Fees.....1,991,550 (27%)
total.....7,452,693

General Expenses:

National Treasury.....1,422,771 (19%)
User Fees.....6,193,554 (81%)
total.....7,616,325

Total National Treasury.....18,259,082 (52%)
Total User Fees.....16,624,294 (48%)

As a result of limited funds from the National Treasury, the Ministry of Health (MOH) has focused its expenditures on hospitals and rural health centers rather than health centers in the city of Santa Cruz. Approximately 95% of the doctors and 80% of the nurses in hospitals and rural Health Centers are funded from the National Treasury (MOH employees), while in the 17 health centers in the city of Santa Cruz only seven doctors and fourteen nurses were employed by the Ministry at the time of the study.

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[1]Exchange rate...$1.00 = 3.81 B's.

In the two urban health centers included in this study, we found the following:

- At Virgen de Cotoca, the only recurrent costs paid from Ministry funds were one auxiliary nurse and a minimal amount of medications and supplies related to specific health campaigns.

- At Santa Rosita, the MOH budget supported one 1/2 time doctor, two auxiliary nurses and a minimal amount of medications and supplies related to specific health campaigns. Other costs (four specialist physicians, one registered nurse, four auxiliary nurses, administrator, cashier/pharmacist, two dentists, medicines, supplies, utilities, maintenance, etc.) are paid from fees collected.

  Supervision of the two centers is provided by MOH staff from the District office.

II.1.2 PROSALUD

PROSALUD, with financial and technical assistance from USAID, has developed a network of primary health care centers throughout the city of Santa Cruz and created a Management Support Unit (MSU) that provides technical, administrative and logistical support to the centers.

PROSALUD has focused on activities and services that have had a direct impact on quality of care. Major initiatives include strengthened supervision, reliable providers and clinic schedule, sufficient supply of medications, community outreach programs, and training which emphasizes both technical skills and on an attitude that the patient comes first. To support this network, all facilities charge for curative services. The charges are similar to the fees charged at MOH facilities.

Approximately 54% of PROSALUD's services are curative and have fees; 46% are preventive and are provided free. Approximately 11% of PROSALUD's services are provided to indigents who do not pay. All user fees collected in the health centers are sent to headquarters and distributed according to annual budgets/plans that are jointly developed by the health centers and the MSU. This enables PROSALUD to cross-subsidize the centers that are not as economically viable.

PROSALUD's annual budget for 1991 was 1,742,893 B's, of which 1,288,189 or 74% was for the 15 health centers and 454,704 or 26% was for the Management Support Unit. In 1991, the average budget per health center was approximately 86,000 B's plus a percentage of the MSU budget (25% of the MSU budget is allocated to the health centers). PROSALUD does not receive direct funding from the national budget. Approximately 90% of the health centers' recurrent costs are covered by user fees.

More important than the amount allocated to the centers is how the money is used. PROSALUD has focused its limited funds on those resources that will provide the greatest benefit to both the patients and the organization. The most important of these are:

- dedicated, full-time general practitioners in each health center who plan, monitor, and control all center activities and who assure both reliable schedules of all clinical staff and high quality care;
- essential medicines in each center;
- labs placed strategically in certain centers to meet the needs of all the centers;
- a planning process that includes the staff of the health centers;
- incentives for all the clinic staff based on fees collected (compared to targets);
- routine supervision that motivates and educates;
- reliable support systems, i.e., information, logistics, financial management.

II.2 Analysis of Costs, Utilization and Cost Recovery

II.2.1 Methodology

This section utilized a basic costing methodology designed to determine the number of services produced, level of resources expended (direct and indirect costs), and income (national budget and revenues from fees). From these figures estimates of unit costs were derived for specific interventions such as consultations, community visits, immunizations, and births for each of the four facilities in the study .[2] The methodology uses a "step-up" approach based on expenditure data collected at facilities.[3] The method only accounts for operating costs and does not include investments in capital goods, major new training activities, or technical assistance for system design and development.

A team of two data collectors using three questionnaires identified four types of information for each of the four health centers:

1) target coverage

2) personnel data on professional staff (full time equivalents by category, hours contracted, percent of time spent on specific services)

3) service production data on the number of specific services delivered (maternal child health consultations, immunizations, births, and community visits)

4) financial data on sources of income (national budget and fees) and expenditures (salaries, medicines, other expenses).[4]

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[2]For complete description and findings see: Manuel Olave, Recurrent Cost Analysis of Primary Health Care in Bolivia, forthcoming.

[3]The "step-up" (or "resource cost") approach begins with specific activities and estimates costs of those activities at the facility level. This approach differs from a "step-down" (or "budget allocation") approach which starts with expenditure budgetary data usually available from higher administrative and reassigns the expenditures to the facility and activity levels. For a discussion of the different approaches see: Maureen Lewis, et. al., Measuring Costs, Efficiency, and Quality in Public Hospitals: A Dominican Case, World Bank Report No. IDP-090, 1990.

[4]At one of the facilities, Virgen de Cotoca, it was necessary to estimate salaries using "shadow prices" because salary data were unavailable. A shadow price may be thought of as the prevailing market price for a good or service. In this case, the shadow prices used were the salaries paid to comparable employees at other MOH facilities. These shadow prices may have overestimated the actual expenditures as we will note below.

In addition, indirect costs were assigned to account for expenses in supervision from the Ministry Regional Health Office (Unidad Sanitaria) and from the central administrative office of PROSALUD.

Unit costs were determined by assigning salary percentages based on estimates of staff time spent on each activity (reported at each facility), estimating use of medicines based on norms for each intervention, and "other costs" apportioned to each activity at the same percentage as salaries. The indirect costs were based on estimates of the time supervisors spend on each facility.

The time period for this study was the third quarter of 1991 (July-September).

II.2 Findings

Volume of Services Delivered

There were significant differences in volume of services delivered between MOH facilities and those of PROSALUD (see Table A). Coverage of target population of MOH facilities was low as measured by per capita consultations per year: MOH averaged 0.24, while PROSALUD averaged 0.97. There is no reason to expect that the production of services was affected by differences in size, socio-economic status, or service characteristics.

The low volume of services delivered (a proxy for utilization) in MOH facilities is translated into low productivity per provider. MOH centers averaged 351 services per provider (physician or nurse), while PROSALUD centers averaged 1,024 services per provider. This three-fold difference is critical for accounting for the low level of efficiency in the MOH centers and the high unit costs per service. The options for resolving this inefficiency are to:

1) increase utilization of MOH health centers, without increasing professional staff;

2) decrease the staff size in MOH centers while maintaining level of utilization; or

3) combination of both 1 and 2.

Unit costs

As noted above, the low utilization of services in MOH facilities translates into high unit costs for most comparable services. Unit costs average B4.87 for PROSALUD facilities and B7.39 in MOH facilities. The PROSALUD unit costs average 66% of the MOH unit costs.

Table A shows significantly higher average unit costs for the MOH center in Santa Rosita. Much of the explanation of the unit cost difference comes from the significantly higher unit costs for births at this facility (four times more than the other facilities). From a management point of view, this analysis suggests that the MOH investigate the explanations for high unit costs of births at this facility to determine cost-containment measures. It seems likely that the number of births is significantly underreported at this facility.

High unit costs result from inefficient use of fixed cost elements (costs which do not decrease with decreases in utilization) and possibly from inefficiencies in the use of variable cost elements (costs which do decrease with decreases in utilization). It is clear that the MOH facilities are underutilized and that the lack of demand is responsible for most of the differences in unit costs between MOH and PROSALUD facilities. Salaries tend to be fixed costs and they account for two thirds of the expenditures of each facility. Medicine and "other costs" are likely to be more variable so that increases in utilization will generate increased costs for only one third of the total cost.

The MOH could reduce unit costs by reducing the fixed costs of services by eliminating staff; however, since availability of sufficient staff is usually a factor which draws more patients, a reduction in staff might be counter-productive, leading to an even greater reduction in utilization. A better approach would be to look carefully at the staffing mix to reassign staff to appropriate activities to reduce expenditures and increase utilization. For instance, nurses could be assigned to do more outreach activities which might generate more demand for services.

It is likely that simply by increasing utilization, recurrent unit costs will decline significantly in MOH facilities. However, an increase in utilization, as will be seen in later analysis, is likely to require the investment of significant resources in training and the development of new management systems. Nevertheless, this investment may not require additional recurrent costs.

Personnel, Medicines, Other Costs, and Indirect Costs

According to the data available, the percentage of expenditures on different budgetary line items and indirect costs did not vary significantly from facility to facility (Table B). Two-thirds of total expenditures were devoted to personnel and between 8% and 15% were devoted to medicines. Supervision accounted for between 2% and 5%.

These findings, however should be viewed with caution due to the methods used to estimate some of the line items. It was necessary, for example, to estimate expenditures on drugs not by actual expenditures or volume of drugs supplied to the center (data on this were not available), but rather by assuming that each service delivered included the amount of drugs that are required by the MOH clinical norms. This method probably over estimates the amount of drugs actually available and distributed, especially in MOH facilities. Information from the surveys of client satisfaction suggest that MOH facilities were not as well supplied with drugs as were PROSALUD facilities (see Section II.5).

In addition, since the salary data for Virgen de Cotoca were unavailable, the shadow prices attributed to the staff may have overestimated the actual income each staff member received. This would skew the percentage of total costs that went to salaries.

TABLE A

HEALTH CENTER EFFICIENCY
(Costs expressed in Bolivianos)
1991

	MOH		PROSALUD	
	V. de Cotoca	Sta. Rosita	La Madre	El Carmen
Target population	11,800	21,606	8,712	15,243
Total staff	10	17	10	10
No. of providers (FTE)*	7.5	7	6.3	7
No. of services	1753	3,330	5,694	7,920
Services per provider	234	476	904	1,131
Total costs	11,393	27,534	29,274	36,461
Cost per service	6.50	8.27	5.14	4.60
Cost per consulta	9.67	7.76	7.01	4.10
Cost per birth	110.13	427.19	97.68	90.68
Cost per vaccine	1.42	2.18	1.14	1.49
Supervision as % of costs	5%	2.2%	2.9%	2.5%
Drug costs per center	1,752	2,188	3,392	4,711
No. of comm. visits	68	56	224	197
Fees collected	4,393	18,652	23,965	35,094
Fees as % of costs	39%	68%	82%	96%
Consultations per capita per year	0.22	0.26	0.97	0.97

* FTE = Full Time Equivalent

TABLE B

PROPORTIONATE DISTRIBUTION OF COSTS
1991

	PROSALUD		MOH	
	El Carmen	La Madre	Sta. Rosita	V. de Cotoca
Personnel	62.7	63.7	66.9	69.2
Medicines	12.9	11.7	7.9	15.4
General	21.8	21.7	23.0	10.2
Indirect (Supervision)	2.6	2.9	2.2	5.2
	100%	100%	100%	100%

Community visits

Table A shows that PROSALUD facilities had major outreach programs with more than four times more community visits than the MOH facilities. It seems likely that outreach activities generate demand for facility service and that the low level of outreach services at MOH facilities may be a factor contributing to low utilization rates.

Fees

Fees for services are strikingly similar for both MOH and PROSALUD facilities. The MOH facility at Virgen de Cotoca charged the lowest fees, while the PROSALUD center at El Carmen charged the highest, however, the range of difference was very small.

TABLE C

FEES CHARGED BY FACILITY
(in Bolivianos)

	MOH		PROSALUD	
	V. de Cotoca	Sta. Rosita	La Madre	El Carmen
MD visit	5	7	7	7
Specialist	7	7	7	9
Birth	110	110-120	120	120
After hrs.		15	15	15

Fees provide a greater proportion of income for PROSALUD facilities (see Table A). For PROSALUD facilities, revenues from fees averaged 89%, while for MOH facilities the fees accounted for only 54% of total expenditures.

It should also be noted that the MOH facility at Santa Rosita recovered a significantly greater percentage of total attributed expenditures (68%) than did the MOH facility at Virgen de Cotoca (39%). This finding, however should be used with caution since the estimates for salaries at the Virgen de Cotoca center were based on "shadow" prices rather than actual expenditures, as in all the other facilities. It is likely that the shadow prices overestimated expenditures on salaries. Therefore, fees probably accounted for a larger portion of the total actual expenditures at the center. Nevertheless, the rates of cost-recovery for MOH centers was likely to be significantly lower (probably no higher than 60% on average) than for PROSALUD.

Again, if utilization rates in MOH facilities increased, it is likely that significant increases in revenues from fees would allow the facilities to reduce their dependence on volunteer labor and/or reduce their need for government subsidy.

II.2.3 Conclusion

The financial analysis found no significant differences between MOH and PROSALUD in levels of fee charges, distribution of resources among budgetary line items, and supervision costs.[5] The study suggests that the central differences between MOH and PROSALUD can be seen in the significantly higher unit costs for services and these differences are largely due to the lower utilization of MOH health services. The analysis suggests at least one factor that may contribute to low demand: the low level of outreach activity in MOH facilities. If the MOH were able to increase utilization it would be a more efficient provider of services and would also gain more revenue from fees.

[5]As noted above, however, the findings from other parts of this study, in particular the operating systems and client satisfaction, suggest that pharmaceutical availability and therefore costs, were likely to be significantly less in MOH facilities than appear in the costing data available. As we will note below, increased expenditures on pharmaceuticals will likely increase utilization and improve revenue collection.

II.3 Operational Systems and Processes

II.3.1 Methodology

The assessment of operational systems and processes is designed to provide an analysis of the strengths and weaknesses of various components of the MOH and PROSALUD health systems, to identify aspects of the systems that require improvement, and identify well- functioning systems and processes in one system that could be replicated by the other.

Information for the Assessment of Operational Systems was obtained through in-depth interviews with health center, district and regional staff and observation of the four health centers. Three individual questionnaires were developed for interviewing the Director of the Unidad Sanitaria, the Director of PROSALUD, and Clinic Directors. Variations of these questionnaires were used to interview other clinic staff, regional and district MOH staff and members of the PROSALUD Management Support Unit.

Observation of the systems and processes in the four clinics was done by LAC HNS staff. It was designed to complement the interviews, and utilized a check list of operational systems that was based on suggestions from key personnel in both PROSALUD and the Ministry of Health and developed in collaboration with colleagues who participated in brainstorming sessions on the overall study.

Information gathered in the interviews and observations was then organized into the following categories:

- **Management/Organization/Planning,**
- **Personnel Policies/Training,**
- **Quality Assurance/Supervision/Monitoring, and**
- **Community Outreach/Promotion/Marketing.**

and presented in chart form (see Figure 2), utilizing a simple Yes/No format, with comments where the selection is not totally clear or where emphasis is given to a particular finding.[6]

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[6]Specific observations of operational systems occurred throughout other parts of the study and those findings are incorporated into section III of the report, "Summary of Recommendations".

Additional relevant information gathered during the interviews but that was not specifically asked of both PROSALUD and the MOH (for example, a discussion with the Director of PROSALUD about PROSALUD's participating planning process which was not assessed in MOH clinics) is also included in the summary findings and recommendations.

In addition to evaluating a broad set of systems and processes that encompass most of the activities of the MOH and PROSALUD health systems and clinics, LAC HNS advisors focused on a limited number of system components and/or processes that are most important to the success or failure of the PROSALUD and MOH health systems and that are both affordable and replicable. The broad set of systems/processes is described below in Figure 2, Assessment of Operational Systems.

Figure 2 includes a total of 34 system components which were identified as in place or lacking. Of the 34, 21 are in place in all four centers studied; 13 components are lacking in one of the MOH centers (Virgen de Cotoca) and 10 in the other (Santa Rosita). All 34 system components were evident in the two PROSALUD centers.

The narrative that follows Figure 2, describes the findings and emphasizes those systems/processes that are determined to be both critical and lacking in one of the two systems (MOH or PROSALUD).

Figure 2
Assessment of the Operational Systems

Operational Systems	PROSALUD Yes	PROSALUD No	MOH Yes	MOH No	Comments
I. Management/Organization/Planning					
- F-T doctor responsible in each center	X			X	Critical, lacking in MOH.
- 24 hour service	X		X-SR	X-VC	Auxiliary nurse available (on-call) at Virgen de Cotoca but difficult to reach. Sta. Rosita is the only urban MOH center offering 24 hour services.
- Information system providing necessary data	X		X		
- Adequate staff on-hand in Centers	X		X		
- Adequate control of contracted staff	X			X	Important, replicable if full-time doctor assigned.
- Logistic support:					
* supplies provided in timely fashion	X		X		Most MOH supplies & medications are procured directly by the health centers. Supplies and medications related to specific campaigns were delivered by the District or Region in a timely fashion.
* medications provided in timely fashion	X		X		
* inventory control system in place	X		X		
- Easy access to Centers	X		X		PROSALUD centers should be improved to allow for bad weather.
- In-house pharmacy	X		X-SR	X-VC	Only 4 out of 17 MOH centers have small pharmacies.
- Lab services available	X		X-SR	X-VC	Only 2 MOH centers out of 17 have labs.
- Services/patient flow efficiently organized	X		X		
- Complaint mechanism in place	X			X	

S.R. - Santa Rosita; V.C. - Virgen de Cotoca

	PROSALUD		MOH		
Operational Systems	Yes	No	Yes	No	Comments
II. Personnel Policies/Training					
- Financial incentives (based on performance)	X			X	Critical, replicable if based on fees collected.
- In-service clinical training/continuing education programs	X		X		MOH training focuses on clinical areas. There is urgent need for training in non-clinical areas.
- Non-clinical training (eg. administrative)	X			X	
- Job descriptions for all key positions	X		X		
III. Quality Assuranc /Supervision/Monitoring					
- Quality control system in place	X		X		
* Norms/protocols (by service)	X		X		
- Adequate medical records	X		X		
- Routine monitoring/supervision of Centers	X		X		During supervisory visits, MOH needs to carefully review prescribing, referral, follow-up procedures and practices.
- System of referral and follow-up in place	X			X	Major problem in one MOH center.
- Continuity of care	X			X	Provider turnover is problem for MOH.
- Clean/orderly Centers	X		X		

Operational Systems	PROSALUD		MOH		Comments
	Yes	No	Yes	No	
IV. **Community Outreach/Promotion/Marketing**					
- Staff assigned to outreach/promotion	X		X		MOH centers currently do almost no outreach.
- Routine home visits for education & follow-up	X			X	The improvement of these activities is important if the MOH is to increase utilization and cost recovery, largely improving the communities perception of the public health system.
- Center sponsors community activities	X		X		
- Center has a budget for promotion/outreach	X			X	MOH should designate funds specifically for outreach and promotion.
- Center services are marketed/promoted	X			X	
V. **Financial Management/Control/Cost Recovery**					MOH system jeopardized by lack of responsible full-time MOH paid clinic director.
- Systems for controlling funds in place	X		X		
- Regular report prepared	X		X		
- Designation/use of funds clearly defined and followed	X		X		
- Established fee schedule in place	X		X		Policy on revisits is unclear in both MOH and PROSALUD.
- Means-testing system in place	X			X	Both MOH and PROSALUD need to review their systems.
- Policy for exempting indigents	X		X		

II.3.2 Ministry of Health

The strengths of the MOH operational systems (in the broadest sense) are 1) the positive attitude and dedication of many key staff at all levels; 2) the physical infrastructure (at least in the Centers we evaluated); 3) clean, orderly centers; 4) a system for controlling funds; 5) easy access to centers; and 6) cost recovery/fee systems in place in the centers. In one of the health centers evaluated, Santa Rosita, many of the important operational systems/processes are in place (24 of 34) including in-house pharmacy, lab and 24 hour service. Nevertheless, ineffective operational systems or lack of key systems and processes is a problem for the MOH urban delivery system in Santa Cruz. The systems/components and staffing that the study identified as lacking in at least one center are the following (items in bold are considered critical and are elaborated on below):

- **full time doctor responsible in each center**
- 24 hour service (only Santa Rosita of the 17 urban centers offers this)
- adequate control of contracted staff
- **in-house pharmacy** (only 4 of the 17 urban centers have pharmacies)
- **in-house lab services** (only 2 of 17 MOH urban centers have labs)
- complaint mechanism
- non-clinical training (administrative, promotion, communication)
- **financial incentives** for MOH staff
- system of referral and follow-up
- continuity of care
- **routine home visits for education and follow-up**
- budget for promotion & outreach
- **health center services marketed/promoted**
- means testing system.

Interviews and surveys indicated that a **full-time MOH physician/Medical Director** in each health center is perhaps the most critical component of the PHC centers and one which will impact positively on numerous other key parts of the overall operation, e.g. planning, control of contracted staff, reliable schedule, continuity, quality assurance, treatment of patients, and clinic management. Neither of the MOH centers has a full-time MOH Medical Director. Santa Rosita relies on a part-time MOH doctor, and Virgen de Cotoca on a private physician working on a fee-for service basis to oversee health center activities.

One of the two MOH centers, Santa Rosita, has an **in-house pharmacy** with **basic medicines** at reasonable fees. Overall, however, only 4 of the 17 urban MOH centers have pharmacies. The addition of small pharmacies stocking a basic group of medicines would improve access, and affordability for health center patients (assuming some type of sliding scale for those unable to pay the full fee). An in-house pharmacy would also facilitate compliance with prescribed treatments and reduce costs related to revisits and secondary care resulting from failure to follow prescribed treatment.

One of the two MOH centers studied offers **in-house lab services**, but only two of the 17 urban MOH centers have labs. The lack of an in-house lab affects the quality of care if providers are reluctant to prescribe or if patients are unable to pay for the outside lab service. It also affects the MOH centers' competitiveness with health centers that offer lab services at reasonable fees.

Incentives are not currently provided to MOH staff (except for a 100B/year bonus that has become a part of the salary). Incentives (similar to those offered by PROSALUD), if provided, could encourage the staff to take a greater interest in improving the quality of services, promoting the services and increasing cost recovery in the centers. Private specialists in the centers have incentives in that their pay is based on services provided and fees collected. MOH staff should have an equally strong motivation to increase clinic utilization and to control the activities of the private providers.

The MOH centers evaluated are currently doing almost no outreach. They do not do routine home visits for education, follow-up or promotion, and do not budget funds for promotion and outreach. Each MOH center should have one **full-time MOH outreach worker** who will promote the health center, organize health education activities, follow-up on specific illnesses, explain medications and treatments, and identify patient problems and concerns.

As the assessment shows, clinical **training** is provided to health center staff. However, non-clinical training in administration, promotion, communication and the outreach activities described above is not provided and is needed to address problems identified in this (and other) sections and to become more competitive.

If the above six systems/processes are strengthened, many of the other operational systems, procedures, processes, etc. identified in Figure 2 are likely to improve as well.

II.3.3 PROSALUD

PROSALUD scored very high on the assessment of operational systems and in many areas should be a model for the Ministry. All of the "critical" operational systems and processes identified above are in place and functioning well in the two PROSALUD centers evaluated.

PROSALUD centers have **full-time doctors/Clinic Directors** who assure compliance with norms and protocols, quality of care and continuity, and proper treatment of patients; develop plans and compare actual with budgeted performance; control contracted staff and motivate all staff; oversee clinic organization including reliable scheduling. Each Center has a well-stocked **in-house pharmacy** and **lab services** available to all centers.

Centers are adequately (and economically) staffed with at least a **Clinic Director**, nurse, auxiliary nurse, **outreach worker,** receptionist, lab technician (in centers with labs), and cleaning person paid by PROSALUD; plus a pediatrician, obstetrician-gynecologist, and dentist paid from user fees. Services and patient flow are efficiently organized and logistic support is good.

An **incentive program** exists for all clinic staff[7] (except the cleaning person) based on fees collected compared with fees budgeted in the annual planning process between the PROSALUD Management Support Unit and the individual clinics. Joint planning including the establishment and monitoring of goals and objectives is a motivating factor for the clinic director. In-service training/orientation is provided in clinical areas, administration, promotion, and communication with and treatment of patients.

Quality assurance is emphasized through routine monitoring and supervision visits on a regular basis. A system of referral and follow-up, utilizing outreach workers is in place. A stable workforce, especially physicians assures continuity of care. **Routine home visits** are emphasized and carried out on a regular basis for education, follow-up and promotion.

Funds are carefully controlled jointly by responsible health center staff and a system that returns all fees collected to the central PROSALUD office (MSU) approximately two times a week. PROSALUD's decision not to allow each center to retain the fees collected is based on the overall need to subsidize centers in poorer parts of Santa Cruz and in peri-urban/rural areas. Incentives for clinic staff, joint planning, and strong support of health center staff outweigh any negative resulting from non-retention of fees. (We do not recommend this system for the MOH.)

PROSALUD has established fee schedules, a policy for exempting indigents and a system of means-testing (determining ability to pay based on socio-economic data gathered by PROSALUD and interviews at time of visit). Nevertheless, there is a level of confusion about fees, especially fees for revisits in PROSALUD centers. Fee schedules, including a clear statement about revisits should be posted in a prominent place near reception in all clinics, and staff should be instructed to explain the fees and enquire about the patients ability to pay. This will help address problems related to inability to pay for drugs and lab after paying for the office visit. (Refer to section II.5 for details on this concern.) The system and method of means-testing should also be reviewed to assure privacy, equity and continued quality.

Although a complaint mechanism allows patients to present concerns to the health center/community board, it is not publicized and patients are not encouraged to use it. An outward display of interest by PROSALUD in the concerns of its patients would be an excellent public relations gesture and could increase patient satisfaction.

Finally, PROSALUD should expand its training/orientation to focus more on how to identify patients who may have difficulty paying for their "full" treatment and to explain the fee schedules. Training should also include an orientation to the complaint mechanism and the system for means-testing.

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[7]Specialist providers who are not PROSALUD staff receive a percentage of the fees they bill: e.g., pediatrician and obstetrician-gynecologist, 50%; dentists, 80%.

II.4 Technical Quality of Services

II.4.1 Purpose

This report analyzes the technical quality of services in two PROSALUD health centers and two centers of the Unidad Sanitaria of Santa Cruz of the Ministry of Health (MOH). Five primary health care (PHC) services were observed: 1) prenatal care, 2) growth monitoring, 3) immunization, 4) oral rehydration therapy, and 5) acute respiratory infections. Results of the technical analysis are being used to identify the deficiencies in PROSALUD and MOH services, and to compare the quality of services.

A technical quality assessment can be used to assess needs, or monitor and evaluate an ongoing PHC program. In both cases similar steps are followed:

1) Delineate the scope of the service (activities, types of facilities, geographic area, etc.);

2) identify the most important components of the PHC service;

3) identify key and secondary indicators;

4) establish thresholds or standards for the indicators;

5) collect and organize the data;

6) analyze the data and compare with the standards;

7) develop a plan to solve the problems and take action; and

8) review the results and determine if additional information is needed.

Based on the findings of this report, PROSALUD and MOH managers can review the data, prioritize problems and develop a strategy to solve deficiencies in service quality.

II.4.2 Methodology

Five PHC services in each of the four health centers were directly observed by graduate nurses. The observations were recorded on checklists that followed the specific steps which health personnel would be expected to follow to comply with accepted standards of care for each service. The service quality assessment in each facility also included brief interviews with health care providers and with the mothers to whom services were provided, in order to verify their level of knowledge or comprehension of key points.

Indicators

The service quality indicators used in this assessment were drawn from the key indicators[8] of technical quality defined in the Primary Health Care Thesaurus developed by PRICOR[9] and/or the Management Advancement Programme Modules[10]. All of the indicators used in this analysis were reviewed by PROSALUD and MOH managers and modified to conform with local norms.

Data Collection

Service quality data were gathered by a team of four graduate nurses, supervised by a professor of nursing. The techniques used by the nurses included 1) direct observations of service delivery, and 2) questions directed at the health provider and client to measure knowledge. The data-gathering team observed services for a period of two weeks in four clinics. Twenty observations per service and clinic were planned. For prenatal care, growth monitoring, and acute respiratory infections, MOH clinics did not have enough clients during the two-week period to allow the observation of 20 consultations. In the case of oral rehydration therapy, both PROSALUD and MOH had less than 20 cases per clinic (total cases: PROSALUD 27, MOH 21). "Not Applicable" observations were excluded from the analysis.

Explanation of the Service Quality Data Presented in Appendices 1-5

The following table presents the number of observations by type of PHC service and by PROSALUD/MOH services.

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[8] The key indicators for each primary health care service seek to measure the correct performance of the steps or tasks considered to be essential for the acceptable overall performance of that service. The selection of those indicators considered "key" was made on the basis of consensus among experts in each service area.

[9] The PRICOR (Primary Health Care Operations Research) Project is a program of applied research financed by the U. S. Agency for International Development and administered by the Center for Human Services. PRICOR was carried out from 1981-1990. One of the management tools developed by PRICOR is the Primary Health Care Thesaurus, which contains a detailed list of the service delivery and support activities which comprise each of seven principal primary health care services, as well as indicators for measuring the performance of each activity.

[10] The Management Advancement Programme (MAP) is a collaborative effort of the Center for Human Services and the Aga Khan Health Network with the goal of developing simple management tools for use by local primary health care program managers, such as observation checklists for assessing service quality, rapid surveys, guides for cost analysis, and other management modules.

PROGRAMS	PROSALUD			MOH		
	Total	La Madre	El Carmen	Total	Santa Rosita	Virgen de Cotoca
Prenatal Care	40	20	20	14	4	10
Growth Monitoring	40	20	20	23	3	20
Immunizations	39	19	20	40	20	20
Oral Rehydration Therapy	27	9	18	21	14	7
Acute Respiratory Infections	40	20	20	36	20	16

In Appendices 1 through 5, the percentage (%) of correct service activities or knowledge is presented for PROSALUD and MOH services, followed by the number of cases (N).

In column 5 of the appendices, the percentage point differences between PROSALUD and MOH services are calculated. The difference is calculated by subtracting the percent correct responses of PROSALUD from the percent of MOH. Thus, a negative (-) number shows a relative deficiency for MOH clinics. A positive number shows a relative deficiency for PROSALUD.

In column 6, the difference between PROSALUD and MOH was divided by 20 and rounded to an integer. The scores in column six are based on a difference of 0-19=0; 20-39=1; 40-59=2; 60-79=3; etc. This allows the reader to readily identify differences greater than 20 percentage points, plus gauge the magnitude of the difference.

Finally in column 1, key indicators, as defined in the PRICOR Thesaurus, are identified by an asterisk (*).

II.4.3 Technical Service Quality Assessment Results

This section presents the results of the service quality assessment for 1) prenatal care, 2) growth monitoring, 3) immunization, 4) oral rehydration therapy, and 5) acute respiratory infections.

Although results for all the service quality indicators examined are presented in Appendices 1-5, this report will focus only on key indicators: 1) the levels of the indicators, and 2) differences between the two health systems (MOH and PROSALUD). In a service delivery setting, service quality data are normally presented directly to service managers and providers. Managers then review the results, determine priority indicators, identify deficiencies, and take action to improve services. This report will be submitted to both PROSALUD and MOH clinic managers for their examination. A potential follow-on activity to this study is a workshop to determine how the technical service quality problems which have been identified can be addressed. One possibility being considered is for PROSALUD to provide technical assistance to the MOH. For that

reason, it is important to identify the relative strengths and weaknesses of both service delivery organizations.

In reviewing the data, managers from PROSALUD and MOH can examine each indicator and consider the following:

1. Is the indicator important for quality services? Indicators can be prioritized as high, medium and low.

2. Has the indicator identified a problem or deficiency in the quality of an activity, client knowledge, or provider knowledge.

3. If a problem has been identified, has it already been resolved?

Managers can then:

4. List indicators which require action to be taken.

5. Describe the action to be taken and follow up required.

The structure of the following presentation of results is to examine: 1) indicators for both PROSALUD and MOH that are less or equal to 80%; and 2) the relative differences between PROSALUD and MOH in technical service quality performance.

Prenatal Care

Among the five PHC services observed, control prenatal showed the highest deficiencies. Comparing PROSALUD and MOH performance, PROSALUD has a higher level of technical quality.

MOH

Although the number of cases observed was small, the large number of indicators with percentages less or equal to 80% indicates a substantial problem. These problems include taking reproductive history, physical examination, ancillary services, referral, client education, supplies, and knowledge of the female client.

Prenatal Care - Deficient Indicators	MOH	
REPRODUCTIVE HISTORY	%	N
What were results of previous pregnancies?	69%	13
Complications during these pregnancies?	77%	13
Spotting-bleeding during current pregnancy or previous ones?	79%	14
Diabetes?	71%	14
Cardiovascular problems?	71%	14
Kidney problems?	71%	14
Are you taking any medications now?	71%	14
PHYSICAL EXAM		
Took blood pressure correctly?	79%	14
Correctly examined the legs, face and hands for signs of edema?	57%	14
ANCILLARY SERVICES		
Referred the patient for Tetanus vaccination?	43%	14
Vaccinated the patient against Tetanus?	29%	14
REFERRAL		
Referred high risk pregnancies?	21%	14
Recommended that high risk pregnancies deliver in hospital?	21%	14
EDUCATION		
Explained the importance of prenatal care?	79%	14
Explained the importance of having birth attended by trained health personnel?	43%	14
Explained the danger signs which require immediate medical care?	43%	14
Explained to the patient that when danger signs are present, to coordinate with family so that she is taken for immediate care?	0%	9
Verified that the patient understood the key messages?	64%	14
SUPPLIES		
Have Tetanus Toxoid vaccine?	71%	14
INTERVIEW WITH PREGNANT WOMAN		
What are the danger signs that require a trained person during your delivery?	29%	14

PROSALUD

The number of indicators with deficiencies in PROSALUD was only one-third the number for the MOH. The areas where PROSALUD can improve quality are reproductive history, referral, and education of the client.

Prenatal Care - Deficient Indicators	PROSALUD	
REPRODUCTIVE HISTORY	%	N
Are you taking any medications now?	60%	40
REFERRAL		
Referred high risk pregnancies?	0%	10
Recommended that high risk pregnancies deliver in hospital?	40%	5
EDUCATION		
Explained the importance of having birth attended by trained health personnel?	70%	40
Explained the danger signs which require immediate medical care?	43%	40
Explained to the patient that when danger signs are present, to coordinate with family so that she is taken for immediate care?	21%	39
INTERVIEW WITH PREGNANT WOMAN		
What are the danger signs that require a trained person during your delivery?	40%	35

Comparative Strengths of PROSALUD and MOH Services

Prenatal Care - Relative Differences between PROSALUD and the MOH

	PROSALUD		MOH		Difference*
REPRODUCTIVE HISTORY	%	N	%	N	
1. What were the results of previous pregnancies?	96%	27	69%	13	-30
2. Diabetes?	93%	40	71%	14	-22
3. Cardiovascular problems?	98%	40	71%	14	-27
4. Took blood pressure correctly?	100%	40	79%	14	-21
5. Correctly examined the legs, face and hands for signs of edema?	95%	40	57%	14	-38
ANCILLARY SERVICES					
6. Referred patient for Tetanus vaccination?	93%	40	43%	14	-50
7. Vaccinated the patient against Tetanus?	90%	40	29%	14	-61
REFERRAL					
8. Referred high risk pregnancies?	0%	10	21%	14	21
EDUCATION					
9. Explained the importance of having birth attended by trained personnel?	70%	40	43%	14	-27
10. Explained to the patient that when danger signs are present, to coordinate with family for her immediate care?	21%	39	0%	9	-21
SUPPLIES					
11. Have Tetanus Toxoid vaccine?	100%	40	71%	14	-29

* Difference = (Percentage for MOH) - (Percentage for PROSALUD)

The above table compares the percentage of correct responses for key indicators, in both PROSALUD and MOH clinics. Only differences larger than 20 percentage points are shown. The reader should be warned that although there may be substantial differentials between PROSALUD and MOH, the number of cases for some indicators is small and caution is warranted in generalizing results.

Of the eleven key control prenatal indicators with substantial differences in quality, the MOH ranked lower on 10 out of 11.

Growth Monitoring

The results below show the MOH with deficiencies in eight key indicators compared to five for PROSALUD.

MOH

Problematic areas include weighing the child and review and follow-up.

Growth Monitoring - Deficient Indicators	MOH	
WEIGHING	%	N
Was the scale tared to zero?	70%	23
REVIEW AND FOLLOW-UP		
Was the growth chart used to explain the child's growth to the mother?	52%	23
Asked the mother if the child has had any health problems since the last weighing?	48%	23
Asked what medications are being given?	0%	6
Recorded on the growth card?	45%	20
Explained how to feed children when ill?	27%	22
EDUCATIONAL SESSIONS		
Explained the importance of weight gain for health?	0%	0
Explained when and where to go for growth monitoring?	0%	0

PROSALUD

Most problems are related to review and follow-up.

Growth Monitoring - Deficient Indicators	PROSALUD	
REVIEW AND FOLLOW-UP	%	N
Was the undernourished child referred for medical care?	75%	4
Asked the mother if the child has had any health problems since the last weighing?	68%	40
Asked what medications are being given?	44%	25
Explained how to feed children when ill?	14%	14
EDUCATIONAL SESSIONS		
Explained the importance of weight gain for health?	63%	40

Comparative Strengths of PROSALUD and MOH Services

The table below shows that of the five key indicators with substantial quality differences, the MOH ranks lower on all five indicators.

Growth Monitoring - Relative Differences between PROSALUD and the MOH

	PROSALUD		MOH		Difference*
REVIEW AND FOLLOW-UP	%	N	%	N	
1 Was the growth chart used to explain the child's growth to the mother?	85%	40	52%	23	-33
2 Asked what medications are being given?	44%	25	0%	6	-44
3 Recorded on the growth chart?	100%	30	45%	20	-55
4 Explained the importance of weight gain for health?	63%	40	0%	0	-63
5 Explained when and where to go for growth monitoring?	100%	40	0%	0	-100

* Difference = (Percentage for MOH) - (Percentage for PROSALUD)

Immunization

The technical service quality assessment for immunization scored very high in both PROSALUD and MOH centers. The only problem encountered was in the MOH facilities; some 20% of clients did not know when they should return for the next immunization.

Immunization - Deficient Indicators	MOH	
EXIT INTERVIEW WITH MOTHER		
When should you return for the next immunization?	80%	40

Oral Rehydration Therapy

MOH

Service processes which require particular attention to improve quality include taking medical history, physical exam, and education regarding oral rehydration salts (ORS).

Oral Rehydration Therapy - Deficient Indicators	MOH	
MEDICAL HISTORY	%	N
Presence of blood or mucous in stools?	76%	21
PHYSICAL EXAM		
Pinched the skin of the child?	24%	21
If the child was dehydrated, was ORT administered immediately or the child referred to the nearest health center?	62%	13
If the dehydration was severe, was rehydration initiated intravenously or using nasogastric tube?	50%	4
ORS EDUCATION		
Was the mother told to give the child extra liquids during diarrhea?	62%	21
Was the mother told how to prepare ORS?	40%	20
Was the mother told how to administer ORS y how often?	80%	20
Was the mother told about feeding practices during and after dehydration?	62%	21
Was the mother told at least 3 signs of dehydration?	0%	21
Was the mother told at least 2 danger signs which indicate that the child should be taken to the nearest health center?	14%	21
Was the mother shown how to prepare ORS?	0%	21
Verified that mother understood key information?	57%	21
EXIT INTERVIEW WITH MOTHER OR CARETAKER		
How do you prepare ORS?	79%	19
What are the danger signs that indicate you should take your child back to the health center?	57%	21

PROSALUD

Similar to the MOH, the service processes in PROSALUD centers which require attention include medical history, physical exam, and education regarding oral rehydration salts (ORS). Also, some health providers had a problem in describing the symptoms of dehydration and when to examine a child.

Oral Rehydration Therapy - Deficient Indicators	PROSALUD	
	%	N
MEDICAL HISTORY		
Presence of blood or mucous in stools?	78%	27
PHYSICAL EXAM		
Pinched the skin of the child?	52%	27
If the child was dehydrated, was ORT administered immediately or the child referred to the nearest health center?	26%	27
If the dehydration was severe, was rehydration initiated intravenously or using nasogastric tube?	0%	5
ORS EDUCATION		
Was mother told how to prepare ORS?	78%	27
Was the mother told about feeding practices during and after dehydration?	48%	27
Was the mother told at least 3 signs of dehydration?	0%	8
Was the mother told at least 2 danger signs which indicate that the child should be taken to the nearest health center?	0%	22
Was the mother shown how to prepare ORS?	35%	26
Verified that the mother understood key information?	52%	27
Was the supply of ORS sufficient during the last month?	74%	27
EXIT INTERVIEW WITH MOTHER OR CARETAKER		
How do you prepare ORS?	76%	21
What are the danger signs that indicate you should take your child back to the health center?	22%	27
INTERVIEW WITH HEALTH PROVIDER		
When you examine a child for signs of dehydration, what signs do you look for?	55%	20

Comparative Strengths of PROSALUD and MOH Services

Oral Rehydration Therapy - Relative Differences between PROSALUD and the MOH

	PROSALUD		MOH		Difference*
MEDICAL HISTORY	%	N	%	N	
1 Pinched the skin of the child?	52%	27	24%	21	-28
2 If the child was dehydrated, was ORT administered immediately of the child referred to the nearest health center?	26%	27	62%	13	36
3 If the dehydration was severe, was rehydration initiated intravenously or using nasogastric tube?	0%	5	50%	4	50
ORS EDUCATION					
4 Was the mother told to give extra liquids during diarrhea?	89%	27	62%	21	-27
5 Was the mother told how to prepare ORS?	78%	27	40%	20	-38
6 Was the mother shown how to prepare ORS?	35%	26	0%	21	-35
7 Was the supply of ORS sufficient during the last month?	74%	27	100%	21	26
EXIT INTERVIEW WITH MOTHER OR CARETAKER					
8 What are the danger signs that indicate you should take your child back to the health center?	22%	27	57%	21	35
INTERVIEW WITH HEALTH PROVIDER					
9 When you examine a child for signs of dehydration, what signs do you look for?	55%	20	100%	21	45

* Difference = (Percentage for MOH) - (Percentage for PROSALUD)

The above table shows that both PROSALUD and the MOH have important weaknesses in this major PHC service.

Acute Respiratory Infections

For acute respiratory infections (ARI), the MOH had 13 key indicators which scored 80% or less, as compared to 9 deficient indicators for PROSALUD. These findings indicate quality deficiencies in both organizations.

MOH

Areas of improvement for the MOH include medical history, physical exam, treatment and referral, patient education, and patient knowledge.

Acute Respiratory Infections - Deficient Indicators	MOH	
MEDICAL HISTORY	%	N
Asked about level of activity?	44%	36
Asked about ability to drink?	53%	36
Asked about presence of throat pain?	47%	36
Asked about presence of ear ache?	46%	35
PHYSICAL EXAM		
Counted respirations per minute?	36%	36
TREATMENT AND REFERRAL		
Told mother not to use antibiotics for colds?	25%	36
Referred children with severe pneumonia or with cough for more than 30 days?	13%	15
EDUCATION		
Explained the importance of completing the treatment?	41%	34
Told mother at least 3 signs of severe ARI?	33%	36
Told the mother that she should bring the child back in case his illness gets worse?	74%	35
Verified that the mother understood key messages?	64%	36
MOTHER'S INTERVIEW		
What are the danger signs which indicate that you should take your child back to the health center?	58%	36
If antibiotics were prescribed, for how long should you give the medicine to the child?	74%	34

PROSALUD

As with the MOH, the areas where PROSALUD needs to improve include medical history, physical exam, treatment and referral, patient education, and patient knowledge.

Acute Respiratory Infections - Deficient Indicators	PROSALUD	
MEDICAL HISTORY	%	N
Asked about level of activity?	67%	27
Asked about ability to drink?	78%	40
Asked about presence of ear ache?	75%	36
PHYSICAL EXAM		
Counted respirations per minute?	39%	36
TREATMENT AND REFERRAL		
Told the mother not to use antibiotics for colds?	35%	40
Referred children with severe pneumonia or cough for more than 30 days?	0%	5
EDUCATION		
Told mother at least 3 signs of severe ARI?	13%	40
Verified that the mother understood key messages?	65%	40
MOTHER'S INTERVIEW		
What are the danger signs that indicate that you should take your child back to the health center?	24%	37

Comparative Strengths of PROSALUD and MOH Services

Acute Respiratory Infections - Relative Differences between PROSALUD and the MOH

	PROSALUD		MOH		Difference*
MEDICAL HISTORY	%	N	%	N	
1. Asked about level of activity?	67%	27	44%	36	-23
2. Asked about ability to drink?	78%	40	53%	36	-25
3. Asked about presence of throat pain?	89%	37	47%	36	-42
4. Asked about presence of ear ache?	75%	36	46%	35	-29
PHYSICAL EXAM					
5. Counted respirations per minute?	39%	36	36%	36	-3
EDUCATION					
6. Explained the importance of completing the treatment?	85%	40	41%	34	-44
7. Told the mother at least 3 signs of severe ARI?	13%	40	33%	36	20
MOTHER'S INTERVIEW					
8. What are the danger signs which indicate that you should take your child back to the health center?	24%	37	58%	36	34

* Difference = (Percentage for MOH) - (Percentage for PROSALUD)

Of the eight key ARI indicators (with substantial differences), six showed a lower quality of service for MOH clinics. For example, less than half of MOH clients are asked about throat pain and told to complete the prescribed treatment.

II.4.4 Conclusion

The results of the service quality assessment can be summarized as follows. The health centers of both the PROSALUD and MOH systems are achieving a very high level of quality with regard to immunization services. They are each adequately delivering growth monitoring services, but need to reinforce personnel skills in communicating with and educating mothers. For the third preventive service -- prenatal care -- there were large differences in the quality of care observed in PROSALUD centers (good) and that observed in MOH centers (poor).

With respect to the two curative services examined -- treatment of diarrhea with oral rehydration therapy and treatment of acute respiratory infections -- both systems exhibited similar weaknesses, especially with respect to certain diagnostic aspects (taking history and physical examination), counselling of mothers, and referral of severe cases to higher levels of care.

The following table summarizes the magnitude of deficiency found in each system in the performance of specific key tasks or activities that comprise each of the five PHC services:

SERVICE	Total No. of Indicators	Total No. of Key Indicators	No. of Deficient Indicators	
			MOH	PROSALUD
Immunizations	44	11	1	0
Growth monitoring	49	25	8	5
Prenatal Care	63	28	20	7
Oral rehydration therapy	41	25	14	14
Acute respiratory infections	45	23	13	9
	242	112	56	35

The above cited weaknesses notwithstanding, it is important to emphasize that the present analysis focused solely on the negative aspects found and did not point out the numerous tasks that are being correctly performed in the vast majority of cases in both PROSALUD and MOH facilities. **In general, with regard to clinical services, it may be concluded that both systems offer a technically competent staff, but that their respective personnel should strengthen their capabilities in patient counseling and education.** In the specific case of prenatal care in the MOH centers, this study found serious deficiencies that should be the object of corrective actions. It would be useful for program managers to review each of the items in the tables found in Appendices 1-5 in order to gain a more comprehensive understanding of the strong and weak points of each service.

The results of the service quality assessment point to the need for taking into account certain clinical skills and above all the importance of strengthening health staff's communication skills in the in-service training activities that have been recommended in several parts of this report. The methodology applied in the service quality observations provides the basis for the development of tools for program monitoring and improvement. The observation checklists can be easily adapted to serve as supervision guides or as reference tools for health care providers. The guides for mothers' exit interviews offer an instrument that may be easily applied by health personnel in order to understand patient perceptions and knowledge with respect to key services.

II.5 Client Satisfaction with Services

II.5.1 Objective of the Client Exit Interviews

The survey was carried out to measure the satisfaction of clients with the services offered and personnel of PROSALUD and Ministry of Health (MOH) centers. The survey was carried out from May 4-16, 1992. The clients interviewed were drawn from two centers pertaining to PROSALUD (La Madre and El Carmen) and two centers of the Ministry of Health (Santa Rosita and Virgen de Cotoca).

II.5.2 Methodology

The sample was selected based on a prior study of the flow of patients in each of the health centers studied, which indicated an average of 100 clients per week. The study sample was thus defined as 100 clients from each of the four facilities, for a total sample of 400 interviews.

The design of the data collection instrument drew on the findings of the focus groups held with female clients of PROSALUD and MOH facilities in February (nine focus groups were held, with a total of 70 patients -- 35 clients of PROSALUD and 35 of MOH centers -- who had visited one of the centers in the previous two weeks). The interview questionnaire is composed of several modules which correspond to the routine which patients follow from the time that they enter the facility (see appendix 6).

Interviews were held with all clients of both sexes that came to the four centers during the period of observation. Clients were interviewed as they completed their consultations.

Consistency checks were performed on the completed questionnaires, and the responses were coded. Data entry and processing were carried out on microcomputers, using EPI-INFO and SPSS/PC+.

II.5.3 Results of the Interviews

II.5.3.1 Demographic Profile of Clients

Age and Sex Distribution of Clients Age 16 and Older

PROSALUD

	MALES		FEMALES	
AGE	%	N	%	N
0 - 5	21	42	16	32
6 - 15	3	5	2	4
16 - 25	3	6	28	56
26 - 35	4	8	11	22
36 - 60	2	3	7	14
60 and older	3	5	2	3
Total	35	69	66	13

MOH

	MALES		FEMALES	
AGE	%	N	%	N
0 - 5	31	62	23	45
6 - 15	7	13	2	4
16 - 25	1	1	13	26
26 - 35	2	3	13	25
36 - 60	2	4	6	12
60 and older	1	2	2	3
Total	43	85	58	11

Age and Sex Distribution of Clients Age 16 and Older

PROSALUD

	MALES		FEMALES	
AGE	%	N	%	N
16 - 25	5	6	48	56
26 - 35	7	8	19	22
36 - 60	3	3	12	14
60 and older	4	5	3	3
Total	19	22	81	95

MOH

	MALES		FEMALES	
AGE	%	N	%	N
16 - 25	1	1	34	26
26 - 35	4	3	33	25
36 - 60	5	4	16	12
60 and older	3	2	4	3
Total	13	10	87	66

The MOH serves a larger percentage of children 0-15 years (63%) than PROSALUD (42%). Within the age group 0-15, a larger percentage of clients are boys than girls. In PROSALUD centers, 24% of total clients are boys within the age group 0-15 while only 18% are girls. In the MOH centers, the sex difference is even more pronounced, with 38% of clinic patients being boys less than 15 years of age and only 25% girls.

Among adult clients (16 years of age or more), females are the predominant users of clinic services in both PROSALUD and the MOH. Some 81% of PROSALUD and 87% of MOH clients are adult females. Thus, only 1 in 5 clients are adult males and probably represent an underserved population, owing to the focus on child and female related health needs.

Marital Status of Clients

	PROSALUD		MOH	
Marital Status	%	N	%	N
Single	20	23	21	16
Married	64	75	68	51
Divorced	3	4	3	2
Widowed	0	0	3	2
Other	13	15	5	4
Total	100	117	100	75

Among both PROSALUD and MOH clients over the age of 15, 4 out of 5 have ever been married or lived in a common law union. Some 64% in PROSALUD and 68% of clients in MOH centers state they are currently married. Adult clients that are single (never married) account for only 1 out 5 clients.

Average No. of Children (among ever married females, age 16 and older)

	PROSALUD		MOH	
AGE		N		N
16 - 25	1.4	48	1.3	18
26 - 35	2.6	24	2.4	21
36 - 60	3.6	14	3.1	15
60 and above	4.0	8	6.4	5
Total		94		59

The number of children ever born is similar among both PROSALUD and MOH clients. Among reproductive age women, PROSALUD clients report 2.6 births and MOH clients, 2.4. Among older women, fertility appears higher for MOH clients, though the number of cases is small.

II.5.3.2 Utilization of Clinic Services and Client Satisfaction

	PROSALUD	MOH
Sources of knowledge about health centers (percent responding yes)	%	%
referred by another person	44	7
referred by a physician	17	2
referred by a neighbor	24	32
referred by a relative	32	29
saw the clinic while passing nearby	42	5
live nearby	54	28

Average number of sources

PROSALUD		MOH	
Both	2.1	Both	1.0
La Madre	1.1	Sta. Rosita	1.0
El Carmen	3.1	V. de Cotoca	1.0

PROSALUD clients report a greater variety of sources of knowledge about health centers. A larger percentage of PROSALUD clients report the following sources: other persons (PROSALUD 44%, MOH 7%); physicians (PROSALUD 17%, MOH 2%); passing by the clinic (PROSALUD 42%, MOH 5%); and living nearby (PROSALUD 54%, MOH 28%). MOH clinics, which tend to have a larger percentage of clients from the surrounding neighborhood, also have a larger percentage reporting a neighbor as a source of knowledge (MOH 32%, PROSALUD 24%).

When the various sources are summed for each client, the average number of knowledge sources is 2.1 for PROSALUD and only 1.0 for MOH clients. The greater number of sources of knowledge among PROSALUD clients is a reflection of both quality of service (e.g., satisfied clients who inform others) and strategic location of clinics on main streets and intersections which provide exposure to clients.

Knowledge and Use of Services			
Average Number of Clinic Services Known by the client (range of 1 to 4)			
		PROSALUD	MOH
		2.5	2.1
Percent distribution of clinic services received		PROSALUD	MOH
		%	%
Pediatrics		7	33
Gynecology		32	19
General Medicine		26	16
Immunization Service		14	24
Nursing		7	3
Well Baby Care		13	5
Prenatal Control			1
Birth			1
Emergency			1
Laboratory		1	
	Total	100	100
	N	200	200

PROSALUD clients are better informed about the range of major medical services provided. An average of 2.5 services are known by PROSALUD clients compared to 2.1 for MOH clients.

The distribution of most frequently sought services varies between PROSALUD and MOH clients. The predominant services of PROSALUD are gynecology, general medicine and growth monitoring. The MOH focuses more on pediatrics (especially in Virgen de Cotoca) and immunization which does not produce revenue. These utilization patterns are consistent with the demographic profile of PROSALUD vs. MOH clients; women make up a higher proportion of clients in PROSALUD facilities, while children are the most frequent clients in MOH facilities. PROSALUD provides a better mix of services across all its clinics; this variety permits PROSALUD to maximize utilization by clients, attract clients back to the facility, and generate revenue to cover costs.

Client Use of Health Centers

Percent of clients that have used other health centers
(In Sta. Rosita only 21% had used other centers)

	PROSALUD	MOH
	%	%
	66	49

Percent distribution of other health services used

	PROSALUD	MOH
	%	%
Other MOH centers	53	16
CNSS	8	20
Private Insurance	11	4
Other Services	27	59
Total	100	100

Percent distribution of reasons for selecting this health center

	PROSALUD	MOH
	%	%
This clinic is closer to home	44	47
Poor services in prior center	6	9
This clinic costs less	4	6
No longer have coverage	5	2
Other reasons	41	36
Total	100	100

Quality of service in previous center compared with this center

	PROSALUD	MOH
	%	%
Better service in other center	14	11
Same quality	60	60
Worse service in the other center	26	29
Total	100	100

(Continued)

Client use of health centers		
Improvements that should be made to previously used centers for clients to return (% of respondents)	PROSALUD	MOH
	%	%
Improve interpersonal treatment of clients	17	13
Have better physicians	15	11
Obtain better medical equipment	5	3
Offer more medical specializations	7	10
	PROSALUD	MOH
Average number of times the client has used this center	7.8	6.4
Percent of clients that do not intend to use this health center in the future	PROSALUD	MOH
	%	%
	4	7

When asked if clients had used other health services, 66% of PROSALUD clients had tried other services, compared to only 49% of MOH clients. The lower percentage among MOH clients was largely due to only 21% of Santa Rosita clients having used another service.

Among PROSALUD clients who have tried another health delivery system, 53% have used MOH health services. In the focus group discussions, some clients reported using both PROSALUD and MOH facilities, depending upon the service. Thus, some of the current PROSALUD users may still be using MOH facilities for other types of services.

When asked why clients had changed to this health center, convenient access was the most important single reason for both PROSALUD and MOH clients (44% and 47%, respectively). Other salient but less noted reasons were poor service, lower cost, and loss of insurance coverage to cover health costs. The results of the exit interviews and the focus groups show that when a PROSALUD clinic is accessible, clients tend to move from MOH centers to those administered by PROSALUD because of what they perceive to be a better quality of service. Thus access, quality of service and reasonable cost constitute the main reasons for clients to select PROSALUD clinics over those of the MOH.

Satisfied PROSALUD clients also indicated their intention to return to same clinic more than did MOH clients, thus reflecting a greater continuity of use among PROSALUD clients. The average PROSALUD client had used the current facility 7.8 times, whereas the MOH client had

used it 6.4 times. (The survey did not include information on clinic drop-outs and their reasons for discontinuing clinic services.) Although the average number of visits is greater for PROSALUD, the average use in both types of facilities is relatively high, reflecting client satisfaction in both systems.

II.5.3.3 Promotional and Marketing Activities

Promotional and outreach activities provided to clients

Percent of clients that have been visited by health center staff during the last three months	PROSALUD		MOH
	%		%
Both	24	Both	15
La Madre	11	Sta. Rosita	4
El Carmen	37	V. de Cotoca	26

Percent of clients receiving various services during the last (in past 3 months) promotional visit	PROSALUD	MOH
	%	%
Talked about health matters	79	7
Explained medication	55	4
Talked about services	67	7
N=	47	28

Clients were asked if they had been visited at home by health center staff during the last 3 months. Although PROSALUD clients reported higher levels of promotional activities (24% PROSALUD, 15% MOH), there were large variations by clinic within each health system. For example, PROSALUD clients from El Carmen reported 3 times the activity of La Madre clients. Among MOH clients, those using Santa Rosita reported almost no outreach activity, while 1 out 4 Virgen de Cotoca clients were visited.

It should be noted that the client catchment area of PROSALUD clinics is larger than the MOH Virgen de Cotoca clinic, and that PROSALUD outreach activities are largely focused on the area immediately surrounding the clinic. Many of PROSALUD's clients come from areas outside of the immediate catchment area covered by promotional activities. Hence if only clients from the immediate area around PROSALUD centers were polled, the percentage visited during the last 3 months should be substantially higher than the 24% reporting a visit.

When clients were asked about the content of the outreach activity, issues such as health promotion and medications were noted by a large percent of PROSALUD clients. These same issues were only noted by a few of the MOH clients. Outreach activities need to be better defined in MOH centers, taking into account that such promotion is one of the best ways to attract new clients and maintain contact with existing clients. The MOH centers need outreach workers who will focus on specific issues which meet client needs and keep them up-to-date on services and other clinic information.

In summary, PROSALUD has mounted a more intensive outreach promotional effort in surrounding neighborhoods by employing an outreach worker in each clinic, as well as involving nurses and physicians in community outreach activities. Not only are PROSALUD clients contacted more often, they are also exposed to a wider range of health service related issues. It should be noted that while the level of promotional activities was generally lower in the MOH centers, there was a large difference between the two MOH facilities studied: the Virgen de Cotoca center carried a much higher level of promotional activities than did the Santa Rosita center. As noted previously, both the MOH and PROSALUD should take measures to standardize promotional activities in their facilities and reduce variation from center to center.

Services provided to indigent clients			
Percent of clients who have been aided by outreach or promotional staff to receive free services (because the client had a difficulty in paying)		PROSALUD	MOH
		%	%
		10	4
	N=	200	200

Clients were asked if the outreach or promotional staff had ever aided them to receive free services; 10% of all PROSALUD clients had been aided by outreach staff, while only 4% of MOH clients had been helped to receive free services.

Participation of clients in clinic activities		
Percent of clients that have ever been asked to participate in Mother's Clubs or other community activities to discuss health issues	PROSALUD	MOH
	%	%
	13	13

Clients were also asked if they had ever been invited to participate in a Mother's Club or other community activity to discuss health issues. In both health systems, only 13% of clients recalled ever being invited to such gatherings. Apparently, the focus is more on bringing information and other services to the client through home visits rather than organizing community activities and inviting participants. This is consistent with client preferences that services come to their homes, rather than having to go out to obtain them. PROSALUD promotional system, based on home visits, should be replicated by the MOH.

With respect to inter-institutional collaboration in their service areas, PROSALUD centers are notably better integrated into community activities that are coordinated with other local institutions. PROSALUD promoters and other health personnel take an active part in parochial and Mother's Club activities and organize activities related to health topics in PROSALUD facilities. At present, the MOH centers studies do not engage in these kinds of activities nor have the linkages with other institutions. However, according to MOH clients who participated in the focus group discussions, such activities previously were carried out in MOH facilities when other personnel were there who were motivated to carry out such outreach.

II.5.3.4 Access to Health Center Services

Average time required to arrive at the health center (minutes)

PROSALUD	MOH
23"	15"

Percent of clients who paid for transportation to the center

	PROSALUD %		MOH %
Both	36	Both	16
La Madre	40	Sta. Rosita	26
El Carmen	32	V. de Cotoca	6

Average cost of transportation

	PROSALUD		MOH
Both	2.2	Both	2.3
La Madre	2.6	Sta. Rosita	2.1
El Carmen	1.8	V. de Cotoca	3.2

Percent of clients that stated that the health center was not easily accessible

	PROSALUD %		MOH %
Both	4	Both	8
La Madre	3	Sta. Rosita	11
El Carmen	4	V. de Cotoca	5

Percent of clients who did not know the clinic's hours of service

PROSALUD %	MOH %
41	42

Percent of clients who came to health center during scheduled service hours, and the physician was not available

	PROSALUD %		MOH %
Both	14	Both	29
La Madre	12	Sta. Rosita	42
El Carmen	16	V. de Cotoca	16

Because PROSALUD centers attract clients from larger catchment areas than MOH centers, the average client travels a longer distance and more time is required (average of 23 minutes for client travel to PROSALUD centers compared to only 15 minutes for MOH). For the MOH's Virgen de Cotoca center with clients coming largely from the immediate neighborhood, the average travel time was only 11 minutes.

Among clients that pay for transport to the clinic, transportation costs are similar for PROSALUD (2.2 Bolivianos) and MOH (2.3 Bolivianos) clients. PROSALUD's El Carmen center was the least expensive since it is located on a main intersection served by buses. The MOH's Virgen de Cotoca center, which is located in the outskirts of Santa Cruz, reported the highest average cost of 3.2 Bolivianos. For clients of La Madre, Santa Rosita and Virgen de Cotoca requiring transportation, some 2-3 Bolivianos must be added to the cost of obtaining health services.

On average in three of the facilities, 5% or less of clients felt the center was not readily accessible. In the Santa Rosita center (MOH), 11% of clients said that the center was not accessible.

Overall, 4 out of 10 clients in both PROSALUD and MOH centers could not accurately recall the hours of clinic services. Moreover, in the focus group discussions, some clients did not know the hours for popular specialized services such as Pediatrics and Gynecology.

Respondents were then asked if they had ever come to the clinic during scheduled hours and not been served because the physician was not available. Twice the percentage of MOH clients (29%) compared to PROSALUD clients (14%) reported having ever visited the center and finding the physician not available. In the MOH centers, this difference is largely related to the complaint of 42% of the patients at the Santa Rosita center that they had at least once not been served due to failure of the physicians to maintain their office hours. Another reason for not being served that was noted in the focus group discussions was that sometimes a fixed number of consultations is set for a clinic and a limited set of numbers or fichas distributed. If the client arrives too late, she will not receive a ficha to receive service the same day.

The fact that a large percentage of clients in both systems do not know the correct schedules of services indicates that both PROSALUD and the MOH should try to address this information gap through promotional visits or posting service schedules in a visible place. MOH centers in particular should stress to physicians the importance of complying with posted schedules.

II.5.3.5 Reception of the Client at the Health Center

Reception of the client by health center staff

Percent who were received and given directions by health center staff upon arrival at the clinic

PROSALUD %	MOH %
89	99

Percent who were not informed upon arrival at clinic how much they would need to pay for the service

	PROSALUD %		MOH %
Both	12	Both	26
La Madre	4	Sta. Rosita	29
El Carmen	20	V. de Cotoca	23

Percent of client satisfied with the receptionist, by type of treatment received

	PROSALUD %	MOH %	Sta. Rosita %	V. de Cotoca %
Kind	100	99	90	100
Empathetic	99	51	2	99
Respectful	100	56	12	99

Upon arrival at a clinic, clients should be received by clinic staff and given directions regarding the service they need. This task is the responsibility of the receptionist in PROSALUD and Santa Rosita (MOH) centers. The MOH's Virgen de Cotoca center did not have a designated receptionist at the time of the survey; thus clients are met by an auxiliary nurse or in some cases the physician.

In PROSALUD centers, 89% of the clients stated they were met and oriented by clinic staff. In the MOH centers, 99% reported receiving direction upon arrival. Most of the PROSALUD clients that were not given directions were from El Carmen, which also has the greatest number of clients and highest level of satisfaction.

Upon arrival at a clinic, it is important that clients are informed about the cost of a health consultation. Some 12% of PROSALUD clients stated they were not informed, compared to twice the percentage in MOH clinics (26%). Many of the clients who were not informed about cost of service were those who received free immunization services. If the service is free, clients should still be informed that they will not be charged. It is important that all clients understand the relative costs of services so that they may make informed choices about where they seek treatment. All health centers should have as a norm that all clients be given an explanation of the costs of services provided, even if they are free.

While there were differences reported in the percentage of clients who received a ficha and were instructed to wait their turn, these differences were related to the number of clients served. Centers with a larger case load require that more clients take a number and wait. In clinics were clients are not waiting and the physician is immediately available, there is little need for the client to receive a ficha. (As noted elsewhere, a majority of clients see a health provider -- physician or nurse -- in 10 minutes or less.)

Overall, clients reported very high levels of satisfaction with the receptionists in PROSALUD (considering them: kind 100%, empathetic 99%, respectful 100%). In the MOH's Virgen de Cotoca center, satisfaction with the receptionist was similar to PROSALUD clinics, while in the Santa Rosita clinic, satisfaction was substantially reduced (kind 90%, empathetic 2%, respectful 12%).

The treatment of clients by the receptionist as they arrive at the center is a salient indicator of clinic quality and client satisfaction. The receptionist is the first contact the client has with the health facility and should provide information on the services available and their costs. The interpersonal relations and communication between the receptionist and client directly influence satisfaction with the service, the willingness to pay for service and to return when health services are needed again. By improving the interaction between clinic staff and clients, the MOH should be able to increase client satisfaction, clinic use and revenue.

Payment of consultation fee to the receptionist

	PROSALUD %	MOH %
Percent of clients who did not pay for consultation services	33	29
1. Curative services	15	5
2. Preventive services	81	91

Percent distribution of clients (receiving medical consultation) who felt service was

	PROSALUD %	MOH %
Inexpensive	34	44
Reasonable	62	54
Expensive	4	2
Total	100	100
N	176	190

In an effort to measure how indigent clients were treated, respondents were asked if they paid for the medical consultation. It was initially expected that a larger percentage of MOH clients, compared to PROSALUD, would be indigent and receive free services. The results indicate the opposite for curative services. Some 15% of PROSALUD clients, compared to only 5% of MOH clients, received free curative consultation services. For preventive services, which are largely free to all clients, 81% of PROSALUD and 91% of MOH clients received these services without paying.

When clients were asked if they had ever received free consultation services because they were unable to pay for them, 23% of PROSALUD compared to only 6% of MOH patients had received free services.

Clients were then asked if they considered the services to be inexpensive, reasonable or expensive. The vast majority in both health systems reported that consultation services were inexpensive or reasonable. Only 4% of PROSALUD and 2% of MOH clients reported that consultation costs were expensive.

Client preference regarding the receptionist			
		PROSALUD %	MOH %
Male		18	30
Female		53	52
No sex preference		30	19
	Total	100	100
Percent distribution of age preference		PROSALUD %	MOH %
Young		19	58
Mature		29	19
No age preference		53	24
	Total	100	100

Regarding client preferences for the receptionist position, the survey showed a preference for female receptionists but no clear pattern regarding age. Results from the focus group discussions, on the other hand, showed a preference for mature females, particularly among gynecology clients who feel more comfortable sharing private information with a mature female.

II.5.3.6 Waiting Time to Receive Medical Care

Client satisfaction with the waiting time and waiting area	PROSALUD	MOH
Average amount of time waiting to receive medical service from physician or nurse	26"	18"
Percent who felt the waiting area was comfortable	% 95	% 98
Percent whose turn in the waiting queue was respected	% 100	% 100
Percent of clients that would like to have health educational materials available in the waiting area	% 86	% 94

Waiting time is largely a function of the volume of clients served by a clinic. Thus, PROSALUD centers, which serve more clients than do MOH facilities, require clients to wait a longer time (average of 26 minutes) compared to the MOH (18 minutes). In PROSALUD, the waiting time averages 18 minutes in La Madre and 34 minutes in El Carmen. In the Ministry, the waiting time is 22 minutes in Santa Rosita and 14 in Virgen de Cotoca. The focus group results did not indicate any problem with the waiting time for a consultation. Clients expressed that they are willing to wait as long as their "turn" is respected. All of the clients surveyed said that their "turn" in the queue was respected.

The vast majority of clients for all centers felt that the waiting area was comfortable. Most expressed that they wanted the clinic to provide health educational materials while they were waiting for the consultation (86% in PROSALUD and 94% in MOH centers).

II.5.3.7 Client Satisfaction with Nursing Services

Level of satisfaction with services received from the nursing staff

Percent of clients which received professional services from a nurse and services received

	PROSALUD %		MOH %
Both	59	Both	71
La Madre	37	Sta. Rosita	44
El Carmen	82	V. de Cotoca	98

	PROSALUD %	MOH %
Pediatrics	43	71
Gynecology	41	24
Lab	00	0
General	35	71
Vaccination	100	100
Nursing	100	100
Well baby care	100	100
Prenatal care	0	100
Delivery	0	100
Emergency	0	0

Percent of clients describing nursing services received as:

	PROSALUD %	MOH %	Sta. Rosita %	V. de Cotoca %
Kind	100	91	71	100
Attentive	100	81	36	100
Respectful	100	73	12	100
N=	118	142	44	98

Percent who stated the place where service was received was clean and things were in order

	PROSALUD %	MOH %
	99	100
N=	118	142

The percentage of clients receiving professional services from a nurse vary by center within the PROSALUD and MOH systems and is largely a function of the type of services provided by the clinic.

Services clearly in the domain of nurses (e.g., vaccinations, growth monitoring, first aid, prenatal care and deliveries) are served by nurse. In the PROSALUD system, nurses appear to play a more important role in gynecological services and a lesser role in pediatrics and general medicine than occurs in the MOH centers.

To gauge the satisfaction of clients with the treatment received from nurses, clients were asked if the nurse was gentle, attentive and respectful. In all PROSALUD centers and the MOH's Virgen de Cotoca center, satisfaction with the nurse was 100%. In the MOH Santa Rosita center, satisfaction was much lower. Some 29% stated the nurse was not gentle; 64% felt the nurse was not attentive; and 88% reported a lack of respect. Similar to the findings about satisfaction with the receptionist, these results underscore a serious deficiency in the treatment of clients by the nursing staff in the Santa Rosita center. It is important that the MOH ensures that patients in all centers are offered a uniform and appropriate treatment. The focus group discussions underscored the importance of the nurse's manner to patients, who noted that the excellent treatment by the nurse in the El Carmen center of PROSALUD made them feel more confident and assured.

When asked about the orderliness and hygiene of the place where nursing services were provided, virtually all the clients responded positively in both the PROSALUD and MOH systems.

II.5.3.8 Client Satisfaction with Physician Services

Satisfaction with services provided by physicians

Percent of clients which received professional services from a physician

	PROSALUD %		MOH %
Both	67	Both	69
La Madre	74	Sta. Rosita	63
El Carmen	60	V. de Cotoca	76

Percent who stated the consulting room was clean and things were in order

	PROSALUD %	MOH %
	99	99
N=	134	136

Percent who were attended with adequate privacy

	PROSALUD %	MOH %
	99	99
N=	134	136

Percent of physician who did not explain the client's medical problem during the examination

	PROSALUD %	N		MOH %	N
Both	25	134	Both	14	136
La Madre	42	74	Sta. Rosita	31	63
El Carmen	3	60	V. de Cotoca	0	76

Percent of client to whom the physician did not explain the results of treatment (prognosis)

	PROSALUD %	N		MOH %	N
Both	17	134	Both	6	136
La Madre	22	74	Sta. Rosita	11	63
El Carmen	12	60	V. de Cotoca	1	76

Percent of clients who understood the physician's instructions

	PROSALUD %	MOH %
	99	100
N=	134	136

Percent of clients who felt comfortable in asking the physicians questions about their health problem

	PROSALUD %	MOH %
	99	99
N=	134	136

(Continued)

Satisfaction with services provided by physician					
Percent of clients who thought they must pay for re-visits					
PROSALUD	NO %	YES %	Don't Know %	Total	N
Both	43	29	28	100	134
La Madre	49	11	41	100	74
El Carmen	35	52	13	100	60
MOH					
Both	56	41	4	100	136
Sta. Rosita	29	63	8	100	63
V. de Cotoca	78	22	0	100	76

Overall, the percentage of clients receiving attention from a physician was similar in PROSALUD and MOH centers. Differences between centers within each type of health system were largely related to the type of service provided. For example, PROSALUD's El Carmen center provides more immunizations than its La Madre center and displays a lower percentage of clients consulted by physicians (60%).

To measure client satisfaction, questions were asked about the type of information provided by the physician. Overall, a larger percentage of PROSALUD clients did not recall being informed about their medical problem (PROSALUD 25%, MOH 14%) and the prognosis (PROSALUD 17%, MOH 6%). There is more variation in terms of illness and prognosis information received from the physician, between individual centers in the same systems than between PROSALUD and MOH facilities in the aggregate. Similar to other findings, clients at La Madre (PROSALUD) and Santa Rosita (MOH) reported less information provided by the attending physician. This difference between clinics in the two health systems was also consistent for the three main curative services: pediatrics, gynecology and general medicine. In the Santa Rosita center, the main problem appears to be among gynecological clients. In La Madre, the lack of physician communication is more pronounced with general medicine services. To improve how physicians inform and communicate with clients -- and as a result improve client satisfaction -- an effort should be made to identify physicians such as those in La Madre and Santa Rosita who need to improve their rapport with clients. Attitudes and skills to improve communication with clients should be explored in more depth as part of in-service training for physicians as well.

Virtually all clients in both the PROSALUD and MOH systems said they understood the instructions the physician provider and felt they could ask questions. In the focus group discussions, respondents emphasized the importance of physicians listening to them, examining them carefully, and then explaining the basic elements of the diagnosis and what they should do to get cured.

A larger percentage of clients believe they must pay for a follow-up consultation in the MOH (41%) compared to the PROSALUD system (29%). But some 28% of PROSALUD clients did not know if they must pay for a follow-up consultation compared to only 4% in the MOH centers. Within each system there are also large differences. For example, the percentage of PROSALUD clients who do not know if they must pay is much larger in La Madre (41%) than in El Carmen (only 13%). Among MOH centers, a larger percentage must pay in Santa Rosita (63%) than in Virgen de Cotoca (22%).

The payment for follow-up consultation is also related to the medical service received, as well as the clinic. In PROSALUD, the percentage who did not know if they must pay was greatest for general medicine (49%). In the MOH centers, the percentage of clients who reported they must pay for a follow-up consultation was highest for gynecology (61%).

These data provide another indication of differences in the quality of service (i.e., the less charging for follow-up the better the quality and client satisfaction) between the PROSALUD and MOH systems, as well as among clinics and services within each health delivery system.

The differences between centers demonstrates the need for establishing a uniform policy with respect to payment for follow-up consultation. The patient needs to be able to plan how much he or she will have to pay for follow-up consultations and should be informed as to specifically when a follow-up consultation is free and when it is not. The affect of the cost of a follow-up consultation on the patient's decision to comply with follow-up treatment visits is also important to consider.

II.5.3.9 Pharmacy Services

Utilization and price of pharmacy services

Percent of clients who were prescribed medications

	PROSALUD %		MOH %
Both	69	Both	87
La Madre	58	Sta. Rosita	76
El Carmen	83	V. de Cotoca	96

Percent of clients who were able to purchase the medications in the same center (among clients receiving prescriptions)

	PROSALUD %		MOH %
Both	62	Both	32
La Madre	67	Sta. Rosita	57
El Carmen	57	V. de Cotoca	12

If not able to obtain the medications in the health center, where can they be obtained

	PROSALUD %	MOH %
Private Pharmacy	97	100
Cooperative	3	0
Total	100	100

Percent of clients who did not believe that the price of the medications was reasonable

	PROSALUD %		MOH %
Both	7	Both	65
La Madre	5	Sta. Rosita	35
El Carmen	9	V. de Cotoca	88

Percent of clients who did not have sufficient funds to buy the medications prescribed

	PROSALUD %		MOH %
Both	38	Both	50
La Madre	40	Sta. Rosita	47
El Carmen	37	V. de Cotoca	52

Percent of clients without sufficient funds to buy medications who explained their financial situation to the physician

	PROSALUD %		MOH %
Both	23	Both	7
La Madre	18	Sta. Rosita	0
El Carmen	28	V. de Cotoca	11

Some 69% of PROSALUD and 87% of MOH clients were prescribed medications. The two PROSALUD center and the Santa Rosita center of the MOH have pharmacies which sell drugs. The MOH's Virgen de Cotoca center does not have a pharmacy which sells drugs, and only a few drug samples, as well as vaccines, are dispensed free-of-charge.

Among clients receiving prescriptions, 62% of PROSALUD and only 32% of MOH clients obtained their medications in the health center. In Virgen de Cotoca, the percentage receiving medications in that facility dropped to only 12% owing to the absence of a pharmacy. Almost all of the clients who did not obtain drugs in the center were required to purchase medications from private pharmacies (normally at a higher price).

When clients were asked if the medications prescribed were reasonably priced, clinics with pharmacies -- in particular PROSALUD facilities -- showed greater satisfaction with drug prices. For example, 88% of the clients in Virgen de Cotoca felt the drug costs were too high compared to only 5-9% in the PROSALUD health centers.

Clients were then asked if they had enough money to purchase all of the medications that were prescribed. Salient percentages in both PROSALUD and MOH centers reported insufficient funds to purchase all of the prescribed medication (38% in PROSALUD and 50% in MOH). In the case of PROSALUD, while the vast majority of clients believed that drugs were reasonably priced at the center (compared to other sources), 1 out of 3 clients nonetheless reported a lack of funds to purchase all of the prescribed medications.

Finally, clients without funds were asked if they had informed the physician about their problem. Only 23% in PROSALUD and 7% in MOH centers (among clients requiring drugs and reporting insufficient funds) informed the physician.

The finding that an important number of clients do not have adequate funds to purchase the prescribed amounts of drugs and are not requesting assistance from the attending physician indicates a reduction in the efficacy of treatment. The focus group discussions also indicated that a large number of clients did not have enough money to purchase all drugs prescribed, but also that some patients are not willing to purchase drugs because of traditional values against the consumption of drugs. Only a small proportion of the focus group participants said they took all the medications prescribed. To ensure that patients are complying with the prescribed treatment, it would be helpful if physicians asked clients about their ability to pay for medicines (since patients are reluctant to say this to physicians) and tried to prescribe only the most essential medications, using the least expensive brands. The MOH needs to address in the short term the undersupply of medicines in its facilities and make their prices more affordable to patients.

II.5.3.10 Laboratory Services

Utilization and price of laboratory services		
	PROSALUD %	MOH %
Percent of clients who required a lab test	38	15
	PROSALUD %	MOH %
Percent of clients who were able to receive the lab services in this center	86	38
Percent of clients (receiving lab services) who felt the service was reasonable priced	PROSALUD %	MOH %
Inexpensive	42	88
Reasonable	47	13
Expensive (only 4 cases in PROSALUD)	11	0
Total	100	100
N=	38	8
Percent of clients (requiring lab services) without sufficient funds to pay for needed lab services	PROSALUD %	MOH %
	47	52

Some 38% of PROSALUD clients required laboratory services, compared to only 15% of MOH clients. Differences in the percentage of clients requiring laboratory examinations exist in the major curative services: pediatrics (PROSALUD 45%, MOH 1%); gynecology (PROSALUD 45%, MOH 16%); and general medicine (PROSALUD 30%, MOH 23%). MOH managers should note that pediatric and gynecological services show substantially lower levels of laboratory examination, when compared to PROSALUD clinics. This is likely to result in less accurate diagnoses by physicians and lower the quality of treatment.

A much larger percentage of PROSALUD clients requiring lab services were able to receive services in same center (86% in PROSALUD, 38% in MOH). About half of the clients in both health systems reported insufficient funds to pay for prescribed laboratory services.

The MOH needs to strengthen and regularize its laboratory services in order to provide its physicians with complete diagnostic instruments and meet its patients' demands. If it is ot feasible to establish a full-service laboratory in each center, then at least one complete laboratory should be established that can meet the demand of the other centers. PROSALUD does this for special analyses, which are all sent to a central lab.

II.5.3.11 Emergency Services

Client satisfaction with and use of emergency services				
		PROSALUD %		MOH %
Percent of clients who have received emergency services in this center	Both	26	Both	15
	El Carmen	37	Sta. Rosita	8
Percent distribution of health center staff who attended the client		PROSALUD %		MOH %
Receptionist		8		0
Nurse		79		62
Physician		8		38
Other		4		0
	Total	100		100
	N	48		21
Percent of clients who received the following treatment by emergency staff		PROSALUD %		Sta. Rosita (MOH) %
Rapid		96		71
Empathetic		100		14
Kind		100		57
Patient		98		29
Gentle		98		29

In addition to providing specialized medical services, a pharmacy and laboratory examinations, another indicator of quality and client satisfaction is the ability to receive emergency services. Similar to other client utilization and satisfaction indicators, the percentage of emergency use is higher among PROSALUD clients. Some 26% of PROSALUD and 15% of MOH clients have ever used emergency services in the same health center. There are also large variations between centers, with 37% of clients of El Carmen (PROSALUD) using emergency services and only 8% in Santa Rosita (MOH). Apparently it is difficult for clients to receive emergency services in Santa Rosita, even though physicians are on-call. In both systems, the majority of emergency clients were served by a nurse.

When asked about their satisfaction with the service, PROSALUD clients showed substantially higher levels. PROSALUD staff were reported to have demonstrated more empathy, kindness, patience and gentleness with clients than emergency staff in Santa Rosita (MOH). These findings again illustrate a deficiency in the interpersonal skills of Santa Rosita staff. The

problems could be addressed by the MOH following a management and training program similar to that of PROSALUD, which stresses the importance of communicating with clients, understanding their concerns and addressing their needs.

II.5.3.12 Client Suggestions for Improving the Quality of Services

Suggestions from clients about how to improve the quality of health services in this center (number of responses = N)

	MOH N
Pharmacy	29
Punctuality of physicians	13
Additional health staff	12
Better interpersonal treatment by staff	8
Greater variety of medicines	7
Laboratory	5
Expand clinic hours	5

	PROSALUD N
Improve infrastructure	19
More specialized medical services	12
Health education talks while waiting	6
Improve access to clinics	6
Greater variety of medicines	5
Additional health staff	5

At the end of the survey, clients were asked to make suggestions for improving clinic services. The above table presents suggestions and the number of cases. In the MOH centers, the three most important issues were: 1) include a pharmacy in the center; 2) make sure that physicians maintain their scheduled hours of service; and 3) increase the number of health staff (specialized physicians, nurses, and outreach). Other suggestions noted were: 1) improve the interpersonal communication skills of center staff; 2) expand the selection of medications available; 3) have laboratory services available; and 4) extend clinic hours.

Among PROSALUD clients, the most important suggestions were: 1) improve the infrastructure of the center, and 2) offer more medical specialties. Other suggestions noted included: 1) provide health talks to waiting clients; 2) improve access to facilities; 3) provide a greater variety of medications in each center; and 4) increase the number of health staff.

The suggestions related to interpersonal communication and skill, compliance of physicians with schedules, and the other management-related recommendations can be addressed by each health system in the near term. Other suggestions that require financing -- such as improvements in infrastructure, addition of pharmacies, and increase in number of personnel -- will require a longer time frame for implementation and will depend on the objectives and goals that each system has developed for the expansion of services.

II.5.4 Strategic Implications for Improving MOH and PROSALUD Health Services

- Both health systems should take into account that some services are more frequently sought or utilized in their centers. In PROSALUD facilities, gynecological/obstetric services are the most heavily utilized, while pediatric services are the most frequent services in the MOH centers. In the medium term, it should be expected that demand will continue to increase in these areas, and that additional specialized personnel will inevitably need to be hired.

- With respect to promotional activities, PROSALUD has a well structured system, but needs to ensure that this system functions equally well in all its facilities. The MOH should emulate the promotional system used by PROSALUD and, as recommended to PROSALUD, ensure that it performs well in all facilities.

- Both systems should try to develop some contingency funding to finance the treatment of indigent patients. Such a fund should be supported, if possible, by donations, so that each facility can cover these non-recovery costs.

- Concerning the hours of service, both PROSALUD and the MOH provide inadequate information to clients. PROSALUD facilities registered a fairly low level of physician absenteeism during established clinic hours, while the MOH facilities, particularly Santa Rosita, registered high levels. Both systems, however, need to emphasize the importance of punctuality amongst physicians and to better inform clients of the schedule of each service by posting this information in visible locations.

- The receptionists in both systems need to provide clients with information on the prices of services, including mention of those services which are provided free of charge. The Santa Rosita center of the MOH needs improvement in the way the receptionist deals with clients. In both systems, clients expressed preference for mature women in the receptionist position.

- The treatment of patients by nurses in the Santa Rosita center of the MOH needs to be improved, particularly with regard to communication with patients. The MOH should provide in-service training to its personnel in effective communication and interpersonal skills.

- In both health systems, physicians need to better explain the diagnosis to patients during the consultation, especially in gynecological cases, and explain the expected results of the treatment prescribed.

- Both health systems must clarify the charge system for follow-up consultations. The study found that clients in all the facilities were confused about whether or not they have to pay for follow-up consultations. Explicit criteria for determining whether or not charges apply must be established. It is likely that charging for follow-up consultation and/or confusion about whether or not there is a charge may lead to failure of patients to keep follow-up appointments due to inability to pay for the subsequent visits.

- In both systems, the majority of patients who were not able to purchase their prescribed medications in the facility did so in a private pharmacy, but obviously at much higher prices. This indicates that if the health centers themselves had essential medicines at a reasonable cost, they would be able to sell these drugs without risk or loss, with a steady demand, since patients have to buy the medicines in any case to obtain treatment. In this same context, it is recommended that the physicians ask patients about their ability to pay for the drugs, only prescribe those that are most needed, and prescribe the most economical brands with the same effectiveness.

- Laboratory services are more frequently used as diagnostic tools in PROSALUD facilities than in MOH centers. If the reason that MOH physicians use fewer lab services is the lack of capacity within the MOH system, service quality may be affected. The MOH should have at least one well equipped central laboratory which can meet the needs of its centers and thus resolve this deficiency.

- Also in both systems, there appears to be a significant percentage of patients who lack funds to buy medications and pay for lab tests. This may be having a detrimental effect on treatment results, on the health of patients, and on costs associated with re-visits and secondary care.

- Finally, concerning the handling of emergency patients, no problems were cited in PROSALUD facilities, but complaints were made against the Santa Rosita center of the MOH. Again, as in the case of the receptionist and nurse, immediate improvements should be made in staff interpersonal skills through training.

III. SUMMARY OF RECOMMENDATIONS

III.1 Synthesis of Recommendations

Since specific recommendations for both MOH and PROSALUD are included throughout this report, and since the primary purpose of the report is to assist the MOH to increase utilization and cost recovery, we focus here on important, overall recommendations for the MOH/Unidad Sanitaria in Santa Cruz.

In order to increase utilization and cost recovery, the MOH must first improve significantly the quality of care of its urban Centers. This improvement will require both increased investment in management support systems, labs and pharmacies, and increased recurrent expenditures in staffing, medicines, supervision and training. The investment and increased budgets will have to come primarily from the Bolivian Government and/or from user fees. (Some donor contribution is possible but not foreseen at this time.)

The MOH faces a dilemma if it hopes to significantly improve all 17 urban health centers. Because of a shortage of Ministry positions for doctors and nurses, it will be difficult for the Ministry to meet minimum staffing requirements in all the health centers. In addition, the MOH has limitations related to resources, the planning/decision-making process, legal constraints, personnel turnover, etc. With partial or limited investment, and therefore limited improvements, there is no assurance of how much quality will improve nor whether or not the centers will recoup the investment through increased patient revenues.

The findings of this study suggest that, at a minimum, the following steps are required for each MOH health center to provide a level of quality and sufficient outreach to increase both utilization and cost recovery. These improvements may also improve many other aspects of the health care delivery system.

1) **One full-time MOH doctor/Health Center Director.** The addition of a well trained full-time MOH health center director will have a positive effect on 1) the planning process; 2) reliable scheduling; 3) control of contract staff; 4) communication between staff, between the centers and the Districts and Region; 5) treatment of and communication with patients; 6) health center organization; 7) proper delegation of authority and responsibility; 8) control of quality; 9) referrals and follow-up; 10) continuity of care; 11) control of funds; 12) the overall image of the health center.

2) **Small in-house pharmacy with basic medicines.** This will 1) improve quality by facilitating compliance with prescribed treatments; 2) improve access and affordability, assuming some type of sliding fee scale for those unable to pay the full price (Results from the patient satisfaction indicated that 50% of MOH patients surveyed did not have money to buy prescribed drugs); 3) increase revenues for the center; 4) reduce costs related to revisits and secondary care resulting from failure to follow prescribed treatment; 5) increase utilization and competitiveness.

3) **Basic in-house lab services** should be located strategically throughout the 17 urban centers. Labs may have a similar impact as that of in-house pharmacies above. (52% of MOH patients indicated in the patient satisfaction survey that they had insufficient funds to pay for lab services.)

4) **One full-time MOH outreach worker and a budget for outreach activities** will enable the centers to 1) make routine home visits for patient education and follow-up; 2) promote health center activities and the "new" health center image; 3) increase health center sponsored community activities; 4) increase utilization. In addition, the considerable downtime of providers, which currently creates problems of low morale, absenteeism, turnover and ultimately quality of care, could be used creatively for outreach promotion and education activities.

5) **Expanded, improved training** for health center staff primarily in non-clinical areas such as; 1) planning; 2) promotion/marketing; 3) communicating with patients, e.g., explanation of fees and explanation of diagnosis, prescribed treatment and expected results of prescribed treatment, and including the importance of courteous, empathetic treatment of patients; ; 4) outreach, i.e., health education and follow-up of specific illnesses; 5) health center administration; 6) budgeting health center expenditures and revenues.

6) **Incentives for the Medical Director and other MOH providers** in the health centers (and the District Directors). Currently the health centers, as a result of underfunding by the MOH, are allowed to keep 100% of the fees they generate. The development of this policy creates the opportunity for the MOH to offer incentives to its staff providers. A system should be developed that encourages staff to take a greater interest in increasing utilization and cost recovery, improving quality and for increasing efficiency and controlling costs (if possible) and rewarding them for improvements made. Non-financial incentives such as positive reinforcement, punctual payment of salary, training, additional responsibility and special awards should be utilized.

The resources required for the improvements vary considerably as demonstrated in the chart that follows.

	RESOURCES REQUIRED				
IMPROVEMENTS	None	Low	Medium	High	Paid from User Fees
F-T Doctor/Health center director				X	
In-house pharmacy/basic medicines				X	X
Lab services				X	X
F-T Auxiliary/outreach			X		
Training		X	X		
Incentives	X				X

The importance of the six improvements listed above is the potential impact they can have on other aspects of the MOH health system. The best example is the full-time health center director. We believe the addition of this person/position to each MOH center is both critical and cost-effective, i.e., the benefits will far offset the cost. It is likely that the effectiveness of other recommendations depend on having a full time center director.

If the MOH determines that it does not have the resources to make the above recommended basic improvements in all of its urban centers, it should consider focusing its limited resources on fewer centers in the city of Santa Cruz. Focusing resources on a limited number of centers and making the recommended improvements would enable the Ministry to develop quality services that patients are willing to pay for, e.g., pharmacy, lab, 24 hour service, and as a result, increase utilization and cost recovery. The other centers could be closed or perhaps turned over to private organizations, as the *Alcaldía* is currently doing with PROSALUD.

The MOH and PROSALUD must find ways to collaborate that take advantage of the strengths, qualities and resources of both systems and use their combined resources to meet the health needs of the people of Santa Cruz. In implementing the recommended improvements, the Ministry might look to PROSALUD for assistance and training in:

- defining the role and responsibilities of the new health center director;
- locating lab services strategically (and perhaps pharmacy services if resources do not allow a pharmacy in each center) to maximize use of staff and equipment;
- development of an outreach program;
- promotion/marketing health center services;
- development of an incentive program;
- referral and follow-up of patients;
- development of multi-function staff positions;
- control of contract staff; and
- consumer research.

III.2 Suggestions for Collaborative Research Activities

Purchase and Use of Prescribed Medications and Lab Tests

The MOH and PROSALUD might collaborate in further research to determine if their patients are buying the medicines and lab tests prescribed for them. The patient survey indicated that large percentages of both MOH and PROSALUD patients do not have money to buy medications and lab tests. If, in fact, they are not following their prescribed treatments, this could be reducing health status and increasing costs of revisits and secondary care. The MOH and PROSALUD (and other providers perhaps) might want to collaborate in the provision of lower cost services or the development of a financing mechanism, e.g., cross subsidization in order to assure the provision of comprehensive services to the indigent.

Reallocation of Health Centers

Research could also be done to determine the effect of closing a number of MOH centers and strengthening the remaining centers. In the MOH-centers included in this study, there was a great deal of excess capacity. In the patient survey and focus groups, there was indication that PROSALUD patients are willing to travel further for high quality services. The MOH could perhaps shift its patients from one MOH center to another that is relatively close.

Non-users

The MOH needs to know more about the population that is using neither Ministry nor PROSALUD facilities. The city of Santa Cruz has a population of approximately 700,000. PROSALUD's target population in the city is 99,812; the Ministry's is approximately 272,000 (extrapolating the average target population of 16,000 for Virgen de Cotoca and Santa Rosita to all 17 MOH centers, indicating a total MOH/PROSALUD target population of 371,812. That leaves 328,000 potential MOH clients. A rapid household survey should by done to determine where "non-users" now receive health services, how they feel about the services they receive, and what they know and think about the MOH. (PROSALUD has a great deal of data on the various communities in Santa Cruz and a methodology for gathering consumer data.)

III.3 Conclusion

The city of Santa Cruz is a large health care market, and resources to serve the market are limited. The great majority of the population now expects to pay for health care services. The prices of services in the two systems studied here are basically the same. A large percentage of the population has been exposed to high quality, comprehensive services through the PROSALUD health care delivery system. It is unrealistic for the MOH to expect to compete with PROSALUD or similar systems unless they offer services of similar perceived quality. Because fees in the PROSALUD system are affordable, it is unlikely that slightly lower fees in the MOH system would attract people away from PROSALUD.

We believe the answer for the MOH is to make the investments described above and improve the use of existing resources to develop a high level of quality in as many of its 17 urban centers as possible. This improved quality, combined with promotion and outreach, allowing time for patients to become aware and convinced of the improvements, will increase utilization and cost recovery. There may be initial increases in MOH costs, but the increased utilization will greatly reduce health center unit costs, and improved quality will likely reduce certain costs related to revisits and secondary care.

Any solution should result in a situation in which both the MOH and PROSALUD benefit, but more importantly that the people who need the services benefit. The MOH and PROSALUD have a unique opportunity to develop innovative approaches and activities through public-private collaboration that can be a model for all of Bolivia.

LIST OF APPENDICES

Apéndice 1
EVALUACION DE LA CALIDAD DE ATENCION EN EL PROGRAMA DE CONTROL PRENATAL
PROSALUD Y MSPPS
Santa Cruz, Marzo de 1992

		(1)	(2)	(3)	(4)	(5)	(6)
	OBSERVACIONES	PROSALUD (40 Obs.)		MSPPS (14 Obs.)		DIF	DIF
		%	N	%	N	(3) – (1)	/ 20
	HISTORIA REPRODUCTIVA						
	5 Revisó y puso al día el registro el carnet familiar de salud?	100%	40	100%	14	0	0
	6 Edad?	98%	40	86%	14	−12	0
	7 Fecha de la última menstruación?	100%	40	100%	14	0	0
	8 Fecha del último parto?	89%	28	83%	12	−6	0
*	9 Número de embarazos anteriores?	100%	31	93%	14	−7	0
*	10 Resultados de esos embarazos?	96%	27	69%	13	−30	−1
*	11 Complicaciones durante los embarazos?	94%	36	77%	13	−17	0
	12 Historia de la lactancia?	48%	27	62%	13	14	0
*	13 Mancha–sangrado durante el embarazo actual o los anteriores?	97%	35	79%	14	−18	0
	14 Ardor al orinar?	80%	40	71%	14	−9	0
	15 Flujo vaginal con olor desagradable?	98%	40	79%	14	−19	0
*	16 Diabetes?	93%	40	71%	14	−22	−1
*	17 Problemas cardiovasculares?	98%	40	71%	14	−27	−1
*	18 Problemas renales?	85%	40	71%	14	−14	0
	19 Heridas previas, especialmente en la pelvis?	75%	40	64%	14	−11	0
*	20 Está tomando medicinas actualmente?	60%	40	71%	14	11	0
	21 Fuma?	80%	40	64%	14	−16	0
	22 Alcoholismo?	80%	40	79%	14	−1	0
	23 Drogradicción?	85%	40	79%	14	−6	0
	24 Algunas otros problemas asociados al embarazo actual?	98%	40	93%	14	−5	0
	25 Vacuna contra el tétano?	100%	40	71%	14	−29	−1
	26 Planes para el parto?	93%	40	21%	14	−72	−3
	EXAMEN FISICO						
	27 Tomó el pulso?	70%	40	36%	14	−34	−1
*	28 Tomó la presión arterial?	100%	40	79%	14	−21	−1
*	29 Midió y pesó el paciente en forma correcta?	95%	40	86%	14	−9	0
*	30 Examinó correctamente las piernas, rostro y manos en busca de signos de edema?	95%	40	57%	14	−38	−1
	31 Calculó la fecha probable del parto?	100%	40	100%	14	0	0
	32 Evaluó la abertura pélvica?	63%	38	57%	14	−6	0
	SERVICIOS EVENTUALES						
*	33 Refirió a la paciente para la vacuna TT?	93%	40	43%	14	−50	−2
*	34 Vacunó a la paciente contra TT?	90%	40	29%	14	−61	−3
	35 Le administró y le recetó suplemento de hierro?	45%	38	79%	14	34	1
	36 Le recetó suplementos alimenticios?	46%	39	18%	11	−28	−1
	REMISION						
*	37 Motivó a la paciente a asistir a su próximo control prenatal?	97%	37	93%	14	−4	0
*	38 Remitió los embarazos de alto riesgo?	0%	10	21%	14	21	1
*	39 Recomendó que los embarazos de alto riesgo tuvieran el parto en el hospital?	40%	5	21%	14	−19	0
	40 Remitió para el examen de orina?	35%	26	57%	14	22	1
	41 Remitió para examen de sangre–hemograma RH y grupo sanguíneo–VDRL–Toxoplasmosis Ghagas?	68%	37	64%	14	−4	0

	OBSERVACIONES	(1) PROSALUD (40 Obs.) %	(2) PROSALUD (40 Obs.) N	(3) MSPPS (14 Obs.) %	(4) MSPPS (14 Obs.) N	(5) DIF (3) – (1)	(6) DIF / 20
	EDUCACION						
*	42 Explicó la importancia del control prenatal	92%	39	79%	14	–13	0
	43 Explicó sobre el aumento de peso normal durante el embarazo?	65%	37	43%	14	–22	–1
	44 Discutió acerca de tipos de alimentos que se deben incluir en la dieta durante el embarazo?	38%	37	29%	14	–9	0
	45 Le explicó con tomar las tabletas de hierro y los complementos alimenticios?	58%	31	79%	14	21	1
	46 Hizo prevenciones acerca del uso del alcohol, tabaco, farmacos?	44%	39	21%	14	–23	–1
*	47 Explicó la importancia de tener un parto asistido por un personal de salud debidamente entrenado?	70%	40	43%	14	–27	–1
	48 Explicó los peligros de abortos efectuados por individuos no calificados?	46%	39	0%	14	–46	–2
*	49 Le explicó cuales son las señales de peligro que requieren atención médica inmediata?	43%	40	43%	14	0	0
*	50 Le explicó a la paciente que cuando presente señales de peligro, coordine con su familia para su atención inmediata?	21%	39	0%	9	–21	–1
*	51 Le dijo a la paciente dónde y cuándo ir al próximo control prenatal?	97%	38	93%	14	–5	0
*	52 Verficó que la paciente entendiera los mensajes importantes?	83%	40	64%	14	–19	0
	53 Le preguntó si tenía alguna pregunta?	48%	40	36%	14	–12	0
	SUMINISTROS						
*	54 Tiene una balanza?	100%	40	100%	14	0	0
	55 Tiene un metro?	100%	40	100%	14	0	0
*	56 Tiene un estetoscopio y un tensiometro?	100%	40	100%	14	0	0
	57 Tiene un reloj con segundera para tomar el pulso?	100%	40	71%	14	–29	–1
*	58 Tiene vacunas de toxoide tetánico?	100%	40	71%	14	–29	–1
	59 Tiene tabletas de hierro?	88%	34	71%	14	–17	0
	60 Tiene formularios o camets de salud para registrar la visita de control prenatal?	100%	40	71%	14	–29	–1
	ENTREVISTAS CON LA MUJER EMBARAZADA						
	61 Tiene planes para que un trabajador de salud entrenado atienda su parto?	100%	40	71%	14	–29	–1
*	62 Cuáles señales de peligro durante el embarazo requieren que una persona entrenada atienda su parto?	40%	35	29%	14	–11	0
*	63 Cuándo y dónde le toca su próxima visita de control prenatal?	93%	40	86%	14	–7	0
	ENTREVISTA CON EL PROVEEDOR						
*	64 Cuáles son las señales de peligro durante el embarazo que requieren atención medica?	100%	40	100%	14	0	0
	65 Usted remite los embarazos de alto riego?	100%	40	100%	14	0	0
	66 Tiene usted forma de hacer seguimiento a los embarazos de alto riesgo?	100%	40	69%	13	–31	–1
	67 Hace usted seguimiento de mujeres embarazadas que no regresen a su cita de cita prenatal?	100%	40	38%	13	–62	–3

Apéndice 2
EVALUACION DE LA CALIDAD DE ATENCION EN EL
PROGRAMA DE CRECIMIENTO Y DESARROLLO
PROSALUD Y MSPPS
Santa Cruz, Marzo de 1992

		OBSERVACIONES	(1) PROSALUD (40 Obs.) %	(2) N	(3) MSPPS (23 Obs.) %	(4) N	(5) DIF (3) – (1)	(6) DIF /20
		EDAD						
*	5	Calculó la edad en base a una fuente confiable?	100%	40	100%	23	0	0
*	6	Calculó la edad correctamente?	100%	40	100%	23	0	0
*	7	Registró la edad correctamente?	100%	40	100%	23	0	0
		PESO						
*	8	Puso la balanza en 0?	88%	40	70%	23	–18	0
	9	Desvistió al niño para pesarlo?	60%	40	46%	24	–14	0
	10	Puso al niño correctamente en la balanza?	100%	40	100%	23	0	0
*	11	Leyó correctamente la escala?	100%	40	100%	23	0	0
	12	Registra el peso correctamente?	97%	39	100%	23	3	0
		SEÑALAR EL CRECIMIENTO DEL NIÑO EN LA TABLA DE CRECIMIENTO						
*	13	Señaló o localizó el peso del niño en la edad correcta?	97%	39	100%	23	3	0
*	14	Señaló o localizó el peso del niño en el peso correcto?	97%	39	100%	23	3	0
	15	Conectó los datos actuales de crecimiento con la curva anterior?	97%	39	100%	23	3	0
		REVISION Y SEGUIMIENTO						
*	16	Remitió al niño desnutrido a la atención médica?	75%	4	NA	0	NA	0
*	17	Le dijo a la madre si el niño había ganado peso o si pesaba lo mismo que la vez anterior?	100%	40	96%	23	–4	0
*	18	Le dijo a la madre cual es el estado nutricional del niño?	93%	40	96%	23	3	0
*	19	Utilizó la tabla de crecimiento para explicarle a la madre como estaba creciendo el niño?	85%	40	52%	23	–33	–1
*	20	Le preguntó a la madre si el niño había tenido problemas de salud en su último control?	68%	40	48%	23	–20	0
*	21	Le hizo recomendaciones acerca de la alimentación y cuidado del niño?	88%	40	91%	23	3	0
*	a	Le preguntó que medicamentos le administró?	44%	25	0%	6	–44	–2
*	b	Registró en el carnet de salud?	100%	30	45%	20	–55	–2
*	c	Verificó el estado de las vacunas?	98%	40	91%	23	–7	0
	22	Le explicó la importancia de la lactancia materna y prácticas del destete?	71%	21	88%	17	17	0
	23	Le explicó a la madre cuales alimentos locales constituyen una dieta balanceada para niños?	63%	40	35%	23	–28	–1
*	24	Le explicó como alimentar a los niños enfermos?	14%	14	27%	22	13	0
	25	Le dijo a la madre cuando traer al niño a pesar otra vez?	100%	40	100%	22	0	0
	26	Verificó que la madre entendiera los mensajes?	78%	40	43%	23	–35	–1
	27	Le preguntó a la madre si tenía alguna pregunta?	18%	40	0%	23	–18	0

Apéndice 2. Continuación

	OBSERVACIONES	(1) PROSALUD (40 Obs.) %	(2) N	(3) MSPPS (23 Obs.) %	(4) N	(5) DIFF (3) − (1)	(6) DIF /20
	SESIONES EDUCATIVAS						
*	28 Explicó la importancia de ganar peso para la salud?	63%	40	0%	0	−63	−3
	29 Explicó el propósito del control de crecimiento?	68%	40	0%	0	−68	−3
	30 Explicó cuándo y dónde ir para el control de crecimiento?	100%	40	0%	0	−100	−5
	31 Utilizó las técnicas educativas y los materiales adecuados?	55%	40	0%	0	−55	−2
	32 Demostró la preparación de alimentos del destete?	9%	23	0%	0	−9	0
	33 Verificó que los asistentes entendieran el mensaje?	51%	39	0%	0	−51	−2
	34 Utilizó ayudas educativas para transmitir los principales mensajes?	23%	40	0%	0	−23	−1
	SUMINISTRO						
*	35 Balanza?	100%	40	100%	23	0	0
*	36 Cuadros de crecimiento?	100%	40	100%	23	0	0
	ENTREVISTA DE SALIDA CON LA MADRE						
*	37 Cuánto pesa su niño?	81%	36	83%	23	2	0
*	38 Si el niño ganó, perdió peso o está igual al control anterior?	95%	40	83%	23	−12	0
*	39 Cuándo viene usted al próximo control?	98%	40	100%	23	2	0
	40 Qué hará usted para mejorar la condición del niño?	86%	36	100%	13	14	0
	41 Qué alimentación dará a su niño para mejorar su estado nutricional?	78%	36	92%	13	14	0
	ENTREVISTA AL PROVEEDOR						
*	42 Tiene usted una manera de hacer seguimiento a los niños desnutridos?	100%	40	93%	14	−7	0
	43 Remite usted a los niños desnutridos?	100%	40	100%	14	0	0
	44 Hace usted seguimiento a los niños desnutridos que no vuelven a control de crecimiento?	100%	40	100%	13	0	0
	a Orienta correctamente a la madre en relación a lo que es crecimiento y desarrollo?	73%	40	96%	23	23	1
	b Realiza el examen cuando el niño está despierto?	78%	40	96%	23	18	0
	c Pone todo el interés en explicar a la madre cada uno de los procedimientos?	68%	40	96%	23	28	1
	d Cuando no cumple con un item insiste en la importancia de que la madre ejercite a su niño?	35%	23	0%	11	−35	−1
	e Le muestra a la madre como hacer el ejercicio?	70%	27	50%	20	−20	−1
	f Recomienda la importancia del retorno al control?	85%	40	87%	23	2	0

Apéndice 3
EVALUACION DE LA CALIDAD DE ATENCION EN EL
PROGRAMA DE INMUNIZACIONES
PROSALUD Y MSPPS
Santa Cruz, Marzo de 1992

	OBSERVACIONES	(1) PROSALUD (39 Obs.) %	(2) N	(3) MSPPS (40 Obs.) %	(4) N	(5) DIF (3) − (1)	(6) DIF /20
	IDENTIFICACION DE NECESIDADES DE VACUNAS						
*	5 Revisó los registros de salud para determinar cuales vacunas necesita hoy?	100%	39	98%	40	−2	0
	6 Revisó los registros de salud de la madre o le preguntó si ha recibido la vacuna de toxoide tetánico?	8%	39	58%	40	50	2
	7 Revisó los registros de vacunación de otros niños de familia?	32%	22	20%	15	−12	0
	8 Recomendó la vacunación, aunque el ninó esté enfermo?	36%	36	52%	29	16	0
	PREPARACION Y CUIDADO DE LA VACUNA						
	9 Verificó el rótulo de la vacuna para verificar que ésta no está vencida?	79%	39	53%	40	−26	−1
	10 Cargó la jeringa sin contaminación?	100%	39	100%	40	0	0
*	11 Guardó la vacuna tapada con hielo durante la sesión?	100%	39	95%	40	−5	0
	12 Preparó el área para la inyección?	100%	39	98%	40	−2	0
*	13 Utilizó una aguja estéril para cada vacuna?	100%	39	100%	40	0	0
	14 Utilizó una jeringa estéril para cada vacuna?	100%	39	100%	40	0	0
	15 Aplicó la vacuna a nivel adecuado (BCG: Nivel Cutáneo; Sarampión: Subcutáneo; DPT y TT: Muscular)?	100%	39	100%	40	0	0
	16 Desechó la jeringa y agua adecuadamente? Aspiró al momento de colocar la inyección IM?	100%	39	100%	40	0	0
	17 Le dió al niño todas las vacunas que requería hoy?	100%	39	97%	39	−3	0
	18 Si la madre necesita TT, la vacunó o hizo los arreglos para la vacuna?	31%	39	46%	37	15	0
	REGISTRO						
*	19 Registró la vacuna en el carnet del niño?	100%	39	98%	40	−3	0
	20 Registró la vacuna en los registros del centro de salud?	90%	39	98%	40	8	0
	EDUCACION						
	21 Le dijo a la madre que vacunas fueron puestas en esta consulta?	72%	39	75%	40	3	0
	22 Le informó a la madre sobre efectos posteriores (fiebre y dolor)?	67%	39	90%	40	23	1
	23 Para la vacuna BCG, le explicó que se formaría costra?	68%	19	100%	4	32	1
	24 Le dijo a la madre donde acudir si hay una reacción fuerte?	49%	39	28%	40	−21	−1
	25 Explicó la importancia de completar las series de vacunas?	64%	39	40%	40	−24	−1
	26 Si se le ha puesto la DPT No 3 ya, hizó énfasis en la importancia de volver para la vacunación?	25%	16	58%	12	33	1

Apéndice 3. Continuación

	OBSERVACIONES	(1) PROSALUD (39 Obs.) %	(1) PROSALUD (39 Obs.) N	(3) MSPPS (40 Obs.) %	(4) MSPPS (40 Obs.) N	(5) DIF (3) – (1)	(6) DIF /20
	EDUCACION						
	27 Le explicó que el niño puede ser vacunado aunque esté enfermo?	18%	39	33%	40	15	0
*	28 Le dijo a la madre cuando volver para la próxima vacuna para ella o para los niños?	82%	39	88%	40	6	0
	29 Le dijo a la madre que motivara a otras mujeres a venir a vacunarse y traer a sus niños?	0%	39	5%	38	5	0
	30 Verificó que la madre entendiera los mensajes importantes?	28%	39	23%	40	–5	0
	31 Le preguntó a la madre si tenía preguntas?	10%	39	0%	40	–10	0
	MANTENIMIENTO DE LA CADENA DE FRIO Y SUMINISTROS						
*	32 Está la nevera funcionando hoy?	100%	39	93%	40	–7	0
*	33 Hay termómetro en la heladera?	100%	39	100%	40	0	0
	34 Hay un registro de la temperatura?	100%	39	100%	40	0	0
*	35 Está la temperatura registrada regularmente?	100%	39	92%	39	–8	0
	36 La temperatura que se registró el mes pasado fue entre 0 y 8 oC?	100%	39	100%	40	0	0
	37 Están todas las jeringas en depósito cerradas?	100%	39	100%	40	0	0
*	38 Fueron suficientes las vacunas que se necesitaron? Tuvieron vacunas suficientes durante el mes pasado?	100%	39	100%	40	0	0
*	39 Fueron suficientes las aguas y jeringas?	100%	39	100%	40	0	0
	40 Fueron los carnet de vacunación suficientes para el último mes?	100%	39	100%	40	0	0
	41 Fueron las vacunas transportadas en cajas de frío, termos con paquetes de hielo?	100%	39	100%	40	0	0
	ENTREVISTA DE SALIDA CON LA MADRE						
	42 Sabe que vacuna recibió usted o su niño hoy?	92%	39	63%	40	–29	–1
*	43 Cuándo debe volver para la próxima vacuna?	97%	39	80%	40	–17	0
	ENTREVISTA CON EL PROVEEDOR DE SALUD A QUE EDAD RECIBE EL NINO LAS SIGUIENTES VACUNAS						
	44 BCG	100%	39	100%	40	0	0
	45 DPT	100%	39	100%	40	0	0
	46 Sarampión	100%	39	100%	40	0	0
	47 Polio	100%	39	100%	40	0	0
	48 Debe usted vacunar a un niño si está enfermo?	97%	39	98%	40	1	0

Apéndice 4
EVALUACION DE LA CALIDAD DE ATENCION EN EL
PROGRAMA DE REHIDRATACION ORAL
PROSALUD Y MSPPS
Santa Cruz, Marzo de 1992

		(1)	(2)	(3)	(4)	(5)	(6)
	OBSERVACIONES	PROSALUD (27 Obs.)		MSPPS (21 Obs.)		DIF	DIF
		%	N	%	N	(3) – (1)	/20
	HISTORIA CLINICA						
*	5 Preguntó sobre duración de la diarrea?	96%	27	95%	21	−1	0
	6 Consistencia de las deposiciones?	100%	27	95%	21	−5	0
*	7 Frecuencia de las deposiciones?	100%	27	100%	21	0	0
*	8 Presencia de sangre o moco en las deposiciones?	78%	27	76%	21	−2	0
*	9 Vómito?	89%	27	81%	21	−8	0
	10 Fiebre?	100%	27	95%	21	−5	0
	11 Tratamiento en el hogar?	70%	27	95%	21	25	1
	EXAMEN FISICO						
	12 Evaluó el estado general (alerta o letárgico)?	100%	27	100%	21	0	0
*	13 Pellizcó la piel del niño?	52%	27	24%	21	−28	−1
*	14 Pesó al niño?	96%	27	100%	21	4	0
	15 Determinó el estado nutricional del niño para asegurarse que no está severamente desnutrido?	85%	27	100%	21	15	0
	16 Tomó la temperatura?	89%	27	100%	21	11	0
*	17 Determinó el grado de deshidratación del niño (ninguno, moderado, severo)?	93%	27	95%	21	2	0
*	18 Prescribió el uso de SRO?	89%	27	84%	19	−5	0
*	19 Recomendó tratamiento en la casa con SRO?	89%	27	84%	19	−5	0
	20 Recomendó no usar antibióticos, excepto cuando las deposiciones contienen sangre o moco?	19%	27	10%	21	−9	0
	21 Le recomendó abstenerse de usar antibióticos?	21%	24	0%	21	−21	−1
*	22 Si el niño está deshidratado le administró suero inmediatamente o remitió al niño al centro de salud más cercano?	26%	27	62%	13	36	1
*	23 Le dió cantidad suficiente de SRO?	93%	27	86%	21	−7	0
	24 Planea reevaluar el estado de deshidratación del niño después de un intervalo apropiado?	81%	27	90%	21	9	0
*	25 Si la deshidratación es severa, la rehidrata con líquido intervenoso o tubo nasogástrico?	0%	5	50%	4	50	2
	26 Si no se encuentran los suministros anteriores a una distancia de 30 minutos del centro de salud, ensaya SRO?	0%	27	33%	3	33	2
	27 Si el niño no puede beber, lo remite o evacua para tratamiento con líquido intravenoso?	0%	27	0%	2	0	0

Apéndice 4. Continuación

		OBSERVACIONES	(1) PROSALUD (27 Obs.) %	(1) PROSALUD (27 Obs.) N	(3) MSPPS (21 Obs.) %	(3) MSPPS (21 Obs.) N	(5) DIF (3) – (1)	(6) DIF /20
		EDUCACION DEL SRO						
*	28	Le dice a la madre que debe darle líquidos extras durante la diarrea?	89%	27	62%	21	−27	−1
*	29	Le dice a la madre como preparar SRO?	78%	27	40%	20	−38	−1
*	30	Le dice a la madre como darle el SRO y que tan frecuentemente?	81%	27	80%	20	−1	0
*	31	Le dice a la madre cuales son las prácticas alimentarias durante y después de la deshidratación?	48%	27	62%	21	14	0
*	32	Le dice a la madre al menos 3 signos de deshidratación?	0%	8	0%	21	0	0
*	33	Le dice a la madre al menos dos señales de peligro que indican que debe ir al centro de salud más cercano?	0%	22	14%	21	14	0
	34	Le dice a la madre que no suspenda la leche materna?	68%	19	63%	16	−5	0
*	35	Demuestra a la madre cómo preparar el SRO?	35%	26	0%	21	−35	−1
*	36	Verfica que la madre entienda la información principal?	52%	27	57%	21	5	0
	37	Le pregunta a la madre si tiene preguntas?	0%	27	76%	21	76	3
		SUMINISTROS						
*	38	Fue el suministro de SRO lo suficiente durante el pasado mes?	74%	27	100%	21	26	1
*	39	Tiene los materiales necesarios (taza cuchara, agua) para preparar y administrar SRO?	100%	27	100%	21	0	0
		ENTREVISTA DE SALIDA CON LA MADRE O EL QUE CUIDA AL NIÑO						
*	40	Cómo prepara usted las SRO?	76%	21	79%	19	3	0
	41	Cuánto SRO le da al niño?	88%	26	80%	20	−8	0
	42	Cada cuanto le da SRO al niño?	88%	26	85%	20	−3	0
*	43	Cuáles señales de peligro le indican que debe volver a traer a su niño al centro de salud?	22%	27	57%	21	35	1
		ENTREVISTA AL PROVEEDOR DE SALUD						
*	44	Cuando usted examina al niño para señales de deshidratación, cuáles señales busca?	55%	20	100%	21	45	2
	45	Cuál fue el grado de deshidratación del niño?	85%	27	100%	18	15	0

Apéndice 5
EVALUACION DE LA CALIDAD DE ATENCION EN EL
PROGRAMA DE INFECCIONES RESPIRATORIAS AGUDAS
PROSALUD Y MSPPS
Santa Cruz, Marzo de 1992

		(1)	(2)	(3)	(4)	(5)	(6)
	OBSERVACIONES	PROSALUD (40 Obs.)		MSPPS (30 Obs.)		DIF	DIF
		%	N	%	N	(3) – (1)	/20
	HISTORIA CLINICA – PREGUNTO:						
	5 Por la presencia de fiebre?	100%	40	100%	36	0	0
*	6 Por la duración de la tos?	100%	40	100%	36	0	0
*	7 Por el nivel de actividad?	67%	27	44%	36	–23	–1
*	8 Por la habilidad para beber?	78%	40	53%	36	–25	–1
*	9 Por la presencia de dolor de garganta?	89%	37	47%	36	–42	–2
*	10 Por la presencia de dolor de oído?	75%	36	46%	35	–29	–1
	11 Por la historia de problemas respiratorios (asma)?	77%	39	64%	36	–13	0
	12 Por la historia de enfermedades respiratorias o TB en la familia?	58%	40	47%	36	–11	0
	13 Acerca de algún tratamiento hecho?	73%	30	83%	35	10	0
	EXAMEN FISICO						
*	14 Evaluó el estado general (alerta, tono muscular)?	100%	40	100%	36	0	0
*	15 Contó las respiraciones por minuto?	39%	36	36%	36	–3	0
	16 Tomó la temperatura?	78%	36	97%	36	19	0
*	17 Escuchó si el niño tenía estridor, ruido en el pecho o ronquera?	100%	40	100%	36	0	0
*	18 Auscultó el pecho?	100%	40	100%	36	0	0
	19 Examinó la garganta para ver si tenía supuración, amigdalas inflamadas o faringe inflamada?	100%	40	100%	36	0	0
	20 Examinó el cuello para ver sus glándulas?	83%	40	53%	36	–30	–1
	21 Observó el color de los labios, orejas, rostro y uñas?	93%	40	100%	36	7	0
	TRATAMIENTO Y REMISION						
*	22 Clasificó al niño por severidad de la enfermedad?	98%	40	100%	36	2	0
*	23 Le indicó antibióticos para neumonía, garganta irritada o otitis?	88%	40	97%	33	9	0
*	24 Le dijo a la madre que no utilizara antibióticos para los resfriados?	35%	40	25%	36	–10	0
	25 Le prescribió jarabe para la tos?	57%	17	40%	35	–17	0
*	26 Remitió al niño con neumonía grave o con tos de más de 30 días?	0%	5	13%	15	13	0
	EDUCACION						
*	27 Explicó cómo administrar los antibióticos?	90%	40	100%	36	10	0
*	28 Explicó la importancia de dar el tratamiento completo?	85%	40	41%	34	–44	–2
	29 Explicó cómo dar lo recetado para la tos?	85%	26	61%	36	–24	–1

Apéndice 5. Continuación

	OBSERVACIONES	(1) PROSALUD (40 Obs.) %	(2) N	(3) MSPPS (30 Obs.) %	(4) N	(5) DIF (3) – (1)	(6) DIF /20
	EDUCACION						
	30 Explicó cómo secar la nariz?	25%	28	31%	36	6	0
	31 Le dijo a la madre que le diera líquidos extra y continuar lactando durante la enfermedad del niño?	53%	36	74%	34	21	1
	32 Le dijo a la madre que mantuviera la temperatura del niño neutral?	32%	34	25%	28	–7	0
*	33 Le dijo a la madre al menos 3 signos de IRA grave?	13%	40	33%	36	20	1
*	34 Le dijo a la madre que volviera a consulta, en caso que empeorara la enfermedad del niño?	88%	40	74%	35	–14	0
*	35 Verificó que la madre comprendiera los mensajes importantes?	65%	40	64%	36	–1	0
	36 Le preguntó a la madre si tenía preguntas?	26%	38	56%	36	30	1
	SUMINISTROS						
	37 Tiene reloj con segundera?	100%	40	100%	36	0	0
*	38 Tuvieron suministros adecuados de antibióticos el mes pasado?	98%	40	83%	36	–15	0
	39 Tiene termómetro?	98%	40	100%	36	2	0
	ENTREVISTA A LA MADRE						
	40 Cómo va a tratar a su niño en la casa?	87%	38	80%	35	–7	0
*	41 Cuáles son las señales de peligro que indican que usted debe traer a su niño – de regreso al centro de salud?	24%	37	58%	36	34	1
*	42 Si le prescribieron antibióticos, cómo los va a administrar?	85%	40	94%	34	9	0
*	43 Si le prescribieron antibióticos, hasta cuándo debe darle la medicina al niño?	85%	40	74%	34	–11	0
	ENTREVISTA AL PERSONAL DE SALUD						
*	44 Cuáles son las señales y síntomas de la neumonía?	100%	40	100%	36	0	0
	45 Cómo puede usted diferenciar entre un resfriado y una neumonía?	100%	40	100%	36	0	0
	46 Cómo puede usted diferenciar entre neumonía de una neumonía grave?	100%	40	100%	36	0	0
	47 En qué casos prescribe usted antibióticos?	100%	40	100%	36	0	0
	48 Qué tratamiento en el hogar recomienda usted para resfriados y neumonía?	100%	40	100%	36	0	0
	49 Cuándo debe usted remitir a un niño al centro de salud o al hospital?	100%	40	100%	36	0	0

Cuestionario para la Encuesta de Satisfacción del Cliente

ENCUESTA DE SATISFACCION: Santa Cruz, Bolivia | Codigos

1 No. de Cuestionario ___ | 1 ___
2 No. de la Clinica ___ | 2 ___
3 No. de la Encuestadora ___ | 3 ___
4 No. del Transcriptor ___ | 4 ___
5 Fecha de la Encuesta _____ | 5 ___

PERFIL DEL USUARIO

6 Sexo __ | 6 ___
7 Edad ___ | 7 ___
8 Estado Civil _____ | 8 ___
9 No. de hijos ___ | 9 ___

INTRODUCCION:

Senor/Senora, estamos haciendo esta encuesta para saber a traves de sus resultados en que aspectos podrian mejorarse los servicios de este Centro. La encuesta esta siendo auspiciada por Prosalud (en La Madre y en El Carmen)./La Encuesta esta siendo auspiciada por el Ministerio de Salud (en Virgen de Cotoca y en Santa Rosita) y esta siendo aplicada a todos los clientes que vengan a este Centro en estas dos semanas y hayan tenido una consulta el dia de hoy. Es muy importante que Ud. se sienta en confianza, y no se preocupe por nada, todas sus respuestas seran tratadas confidencialmente.

Me permite comenzar con las preguntas?

USO DE LOS SERVICIOS

A seguir le hare algunas preguntas a cerca de su conocimiento del centro y su experiencia con los servicios del mismo el dia de hoy.

Como conoce Ud. la existencia de este Centro?

10	Por una vecina?	SI(1) NO(0)	10 ___
11	Por una pariente?	SI(1) NO(0)	11 ___
12	Por alguna referencia del medico?	SI(1) NO(0)	12 ___
13	Porque vio este Centro al pasar?	SI(1) NO(0)	13 ___
14	Porque vive cerca?	SI(1) NO(0)	14 ___
15	Por referencia de otra persona	SI(1) NO(0)	15 ___

(NOTA:Esta es una Respuesta Multiple, cada una debe ser llenada, marque con una "x" cada una de las respuestas SI o NO).

16 Puede describir los servicios que ofrecen en este Centro? 16 ___

(1) (2) (3) (4)

(NOTA:El encuestado debe enumerar los servicios que conoce y Ud. marque con una "x" uno solo de los numeros con el total de servicios que el/la encuestado(a) conoce).

17 Usted tiene confianza en los servicios de este Centro? 17 ___ *

SI(1) NO(0) NS/NR(9)

(NOTA:Aca Ud. debe escoger una sola de las respuestas, marque con una"x" la respuesta).

18 Porque servicio ha venido a este Centro? 18 ___

(NOTA:La respuesta a la pregunta 18 es abierta, escriba con letra clara la respuesta que le den, no interprete la respuesta).

19 Antes de venir a este Centro, ha usado el servicio de otro Centro anteriormente? 19 ___

SI(1) NO(0)Ir a la 24 NS/NR(9)Ir a la 24

20 Cual de estos Centros ha usado: 20 ___

(1) Otros Centros del Min. de Salud Publica
(2) CNSS
(3) Seguro Privado -
(4) Otro Servicio
(9) NS/NR

(NOTA: Este es un listado de preguntas, solamente UNA debe ser escogida, lea la lista al encuestado(a) y marque con una "x" la respuesta escogida).

21 Porque cambio de Centro? 21 ___ *

---

22 En el anterior Centro que iba la atencion era: 22 ___

(1)Mejor
(2)Igual
(3)Peor

23 En que deberia mejorar el Centro que Ud. utilizo anteriormente para volverlo a usar? 23 ___

(1) Mejorar el trato a las personas
(2) Tener mejores medicos
(3) Contar con mejores materiales medicos
(4) Tener mas especialidades
(5) Otro_____

24 Cuantas veces ha visitado este Centro? _____ 24 ___

25 Tiene Ud. intencion de volver a este Centro? 25 ___

SI(1) NO(0) NS/NR(9)

ACTIVIDADES DE PROMOCION

Las siguientes preguntas estan relacionadas con las actividades que se realizan para la promocion del centro.

Los ultimos tres meses ha sido visitado(a) por algun funcionario de salud? (Por algun(a) Responsable Popular de Salud?)

26 Enfermera (SI)(NO) (Obs.:Si todas las 26 ___
27 Medico (SI)(NO) respuetas son NO 27 ___
28 Promotora (SI)(NO) ir a la 34) 28 ___

Cuando fue visitado(a) la ultima vez, que hizo el/la funcionario(a) de salud?

29 Le hablo de asuntos de salud? SI(1) NO(0) 29 ___
30 Le explico a cerca de medicamentos? SI(1) NO(0) 30 ___
31 Le hablo de los servicios del Centro? SI(1) NO(0) 31 ___
32 Le llevo medicamentos a su casa? SI(1) NO(0) 32 ___
33 Lo(a)visito porque estaba en campana? SI(1) NO(0) 33 ___

34 En alguna oportunidad (pasado) en que tuvo Ud. dificultad de pagar la consulta, el(la) funcionario(a) de salud lo(a) ayudo en conseguir una consulta gratuita? (Solamente en caso de indigentes, si no saltar a la 35) 34 ___

SI(1) NO(0) NS/NR(9)

35 A usted la han llamado a participar en clubes de madres o a reuniones de la comunidad para discutir temas de salud? 35 ___

SI(1) NO(0)Ir a la 37 NS/NR(9)Ir a la 37

36 Fue algun funcionario(a) de este Centro? 36 ___

SI(1) NO(0) NS/NR(9)

ACCESO

Ahora vamos a seguir con preguntas respecto a la manera como se transporto hasta este centro el dia de hoy.

37 Como vino al Centro? 37 ___

(1) A pie
(2) En bus
(3) Taxi
(4) Carro propio
(5) Otro_____

38 Cuanto tiempo le ha tomado llegar desde su casa hasta el Centro? _____min. 38 ___

39 La localizacion del Centro es de facil acceso? 39 ___

SI(1) NO(0) NS/NR(9)

40 Cuanto pago en total de Transporte hasta el Centro? 40 ___

(BS_____)

41 Usted conoce los horarios de atencion del Centro? 41 ___

SI(1) NO(0) NS/NR(9)

42 Ha venido Ud. a este Centro en los horarios de atencion, y no estaba el medico? 42 ___

SI(1) NO(0) NS/NR(9)

RECEPCION

A continuacion las preguntas que le hare estan relacionadas con la recepcion de clientes en el Centro el dia de hoy.

43 Cuando Ud. llego al Centro habia alguna persona a quien dirigirse? 43 ___

SI(1) NO(0) NS/NR(9)

44 Le explicaron cuanto deberia pagar por la consulta? 44 ___

SI(1) NO(0) NS/NR(9)

45 Cuando selecciono y/o recibio el servicio que deseaba, pago la consulta? 45 ___

SI(1) NO(0) NS/NR(9)

46 Le dieron una ficha y le comunicaron que deberia esperar su turno? 46 ___

SI(1) NO(0) NS/NR(9)

47 Las tarifas de las consultas de este Centro son: 47 ___

(1) Baratas
(2) Razonables
(3) Caras

48 Si no pago la consulta por falta de dinero, el trato que le dieron fue bueno? (Solo en los casos de personas indigentes, sino saltar) 48 ___

SI(1) NO(0) NS/NR(9)

Como lo(a) trato la persona que lo recibio?

49 Amablemente	SI(1) NO(0)	49 ___	x
50 Solidariamente	SI(1) NO(0)	50 ___	x
51 Respetuosamente	SI(1) NO(0)	51 ___	x

52 Usted esperaba encontrar en la recepcion a: 52 ___

(1) Un hombre
(2) Una mujer
(3) Indiferente

53 Esperaba que sea una persona: 53 ___

(1) Joven
(2) Mayor
(3) No importa la edad

54 Considera Ud. que ha habido voluntad por parte del recepcionista en atenderlo (la) y solucionar sus necesidades? 54 ___ x

SI(1) NO(0) NS/NR(9)

ESPERA

Las siguientes preguntas estan relacionadas cuando Ud. se encuentra en la sala de espera.

55 Cuanto tiempo tuvo que esperar? 55 ___

_____min

56 Es comodo el lugar de espera? 56 ___

SI(1) NO(0) NS/NR(9)

57 Durante la espera, ha sido respetado su turno? 57 ___

SI(1) NO(0) NS/NR(9)

58 Mientras espera le gustaria que hubiera material educativo de salud para distraerse? 58 ___

(1) SI
(2) NO
(3) Indiferente

SERVICIO DE LA ENFERMERA

A seguir le hare algunas preguntas con relacion al servicio de la enfermera durante su estadia en el centro el dia de hoy.

59 Recibio Ud. atencion profesional de la enfermera? 59 ___

SI(1) NO(0)Ir a la 67 NS/NR(9)Ir a la 67

60 El trato recibido por la enfermera fue apropiado? 60___

SI(1) NO(0) NS/NR(9)

Como fue su trato?

61 Gentil SI(1) NO(0) 61 ___
62 Atenta SI(1) NO(0) 62 ___
63 Respetuosa SI(1) NO(0) 63 ___

64 El ambiente donde fue atendido(a) por la enfermera era ordenado e higienico? 64 ___

SI(1) NO(0) NS/NR(9)

65 El servicio profesional que recibio de la enfermera corresponde a lo que esperaba? (Por Ejemplo: Si le pusieron mal una inyeccion. Si le hizo una mala curacion.) 65 ___

SI(1) NO(0) NS/NR(9)

66 Considera Ud. que ha habido voluntad por parte de la enfermera en atenderlo(la) y solucionar sus necesidades? 66 ___

SI(1) NO(0) NS/NR(9)

SERVICIO DEL MEDICO

Las siguientes preguntas estan destinadas a conocer su experiencia el dia de hoy con el medico.

67 Recibio Ud. atencion profesional del medico? 67 ___

SI(1) NO(0)Ir a la 95 NS/NR(9)Ir a la 95

68 El medico que la atendio la recibio atentamente? 68 ___

SI(1) NO(0) NS/NR(9)

69 El consultorio es ordenado e higienico? 69 ___

SI(1) NO(0) NS/NR(9)

70 En el consultorio que fue atendido(a) hay suficiente privacidad? 70 ___

SI(1) NO(0) NS/NR(9)

71 Usted se siente en confianza con el medico? 71 ___

SI(1)Ir a la 73 NO(0) NS/NR(9)

72 Porque? 72 ___

---

73 Durante el dialogo con el medico, ha sido escuchada con paciencia la explicacion de su dolencia? 73 ___

SI(1) NO(0) NS/NR(9)

74 El medico le explico cual era su problema cuando la revisaba? 74 ___

SI(1) NO(0) NS/NR(9)

75 Le explico el medico el tratamiento que debia seguir? 75 ___

SI(1) NO(0) NS/NR(9)

76 Le explico como se sentiria despues del tratamiento? 76 ___

SI(1) NO(0) NS/NR(9)

77 Entendio las instrucciones del medico? 77 ___

SI(1) NO(0) NS/NR(9)

78 Ud. piensa que esta bien hacerle preguntas al medico a cerca de su problema? 78 ___

SI(1) NO(0) NS/NR(9)

79 Considera Ud. que es necesario retornar cuando el medico asi lo prescribe? 79 ___

SI(1) NO(0) NS/NR(9)

80 Ud. tiene que pagar por reconsulta? 80 ___

SI(1) NO(0) NS/NR(9)

81 Considera Ud. que ha habido voluntad por parte del medico en atenderlo(a) y solucionar sus necesidades? 81 ___

SI(1) NO(0) NS/NR(9)

FARMACIA

Las preguntas que continuan estan relacionadas a la obtencion de los medicamentos que le fueron recetados el dia de hoy.

82 Le dieron receta? 82 ___

SI(1) NO(0)ir a la 89 NS/NR(9)Ir a la 89

83 Los medicamentos que le recetan los consigue en este Centro? 83 ___

SI(1)Ir a la 85 NO(0) NS/NR(9)Ira la 85

84 Donde? 84 ___

(1) En una farmacia particular
(2) En la CNSS
(3) En una cooperativa
(4) Otro_____

85 Los precios de los medicamentos son razonables? 85 ___

SI(1) NO(0) NS/NR(9)

86 Tiene en este momento Ud. dinero para comprar los medicamentos? 86 ___

SI(1)Ir a la 89 NO(0) NS/NR(9)Ir a la 89

87 Si no tiene dinero para comprar los medicamentos, Ud. le explica esto al medico? 87 ___

SI(1) NO(0)Ir a la 89 NS/NR(9)Ir a la 89

88 Recibe ayuda del medico cuando no puede comprarlos? 88 ___

SI(1) NO(0) NS/NR(9)

LABORATORIO

Ahora las siguientes preguntas estan relacionadas con el servicio de laboratorio.

89 El medico le prescribio examen de laboratorio? 89 ___

SI(1) NO(0)Ir a la 95 NS/NR(9)Ir a la 95

90 Lo hizo en el mismo Centro? 90 ___

SI(1)Ir a la 92 NO(0)

91 En este Centro le dieron alguna referencia de otro laboratorio? 91 ___

SI(1)Ir a la 94 NO(0)Ir a la 94 NS/NR(9)Ir a la 95

92 El servicio de laboratorio de este Centro fue satisfactorio? 92 ___

SI(1) NO(0) NS/NR(9)

93 El servicio de laboratorio en este Centro es 93 ___

(1) Barato
(2) Razonable
(3) Caro

94 Tiene Ud. en este momento dinero para el examen de laboratorio? 94 ___

SI(1) NO(0) NS/NR(9)

EMERGENCIA

A continuacion las preguntas que le hare estan relacionadas con las situaciones de emergencia que hayan ocurrido fuera de los horarios de atencion.

95 Ha recurrido Ud. a este Centro en un caso de emergencia fuera de horarios de atencion? — 95 ___

SI(1) NO(0)ir a la 106

96 Le dieron atencion? — 96 ___

SI(1) NO(0)Ir a la 104

97 Quien lo(a) atendio? — 97 ___

(1) Un recepcionista,
(2) Una enfermera,
(3) Un medico,
(4) Otro_____

Como lo trato la persona que lo atendio, de una manera:

98	Serena	SI(1) NO(0)	98 ___
99	Rapida	SI(1) NO(0)	99 ___
100	Solidaria	SI(1) NO(0)	100 ___
101	Amable	SI(1) NO(0)	101 ___
102	Paciente	SI(1) NO(0)	102 ___
103	Gentil	SI(1) NO(0)	103 ___

104 Si no pudieron atender su caso de emergencia le dieron en este Centro alguna referencia donde debia acudir para que lo(a) ayudaran? (Solo llenarla cuando la/el cliente no haya recibido atencion de emergencia.) — 104 ___

SI(1) NO(0) Ir a la 106

105 Donde? — 105 ___

_____

106 Que sugeriria Ud. que se deba hacer para mejorar la atencion en este centro?

106 ___

_____

_____

_____

_____

Muy bien con esto concluimos la encuesta. Gracias por tomarse su tiempo y participar en esta encuesta.